



THE UNIVERSITY *of* EDINBURGH

This thesis has been submitted in fulfilment of the requirements for a postgraduate degree (e.g. PhD, MPhil, DClinPsychol) at the University of Edinburgh. Please note the following terms and conditions of use:

This work is protected by copyright and other intellectual property rights, which are retained by the thesis author, unless otherwise stated.

A copy can be downloaded for personal non-commercial research or study, without prior permission or charge.

This thesis cannot be reproduced or quoted extensively from without first obtaining permission in writing from the author.

The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the author.

When referring to this work, full bibliographic details including the author, title, awarding institution and date of the thesis must be given.



Older People's Psychological Change Processes: A Research Portfolio

Suzanne Johncock

**Doctorate in Clinical Psychology
The University of Edinburgh**

2015

**Supervised by Dr H. Griffiths (The University of Edinburgh)
Dr F. Macleod (NHS Tayside)
Dr H. Nicholson-Langley (NHS Tayside)**



D.CLIN. PSYCHOL.

UNIVERSITY OF EDINBURGH / NHS (SCOTLAND)

TRAINING PROGRAMME

Front sheet / Title Page for Submitted Academic Work

TRAINEE NAME: Suzanne Johncock

TITLE OF SUBMISSION: Older People's Psychological Change Processes: A Research Portfolio

COURSE SUBMITTED FOR (please tick relevant box):

	CP1	CP2
Case conceptualisation (CP1 and CP2)	<input type="checkbox"/>	<input type="checkbox"/>
Case study (only for those starting pre 2009)	<input type="checkbox"/>	<input type="checkbox"/>
Essay questions (only for those starting pre 2009)	<input type="checkbox"/>	<input type="checkbox"/>
Research proposal (R1)		<input type="checkbox"/>
Small scale research project (R2)		<input type="checkbox"/>
Thesis		<input checked="" type="checkbox"/>

Submitted in part fulfilment of the degree of doctorate in Clinical Psychology at the University of Edinburgh

Date Submitted: 17.08.2015, amendments submitted on 24.08.2016

D. Clin. Psychol. Declaration of own work

This sheet must be filled in (each box ticked to show that the condition has been met), signed and dated, and included with all assignments - work will not be marked unless this is done

Name: Suzanne Johncock

Assessed work: Thesis

Title of work: Older People's Psychological Change Processes: A Research Portfolio

I confirm that all this work is my own except where indicated, and that I have:

- Read and understood the Plagiarism Rules and Regulations ✓
- Composed and undertaken the work myself ✓
- Clearly referenced/listed all sources as appropriate ✓
- Referenced and put in inverted commas any quoted text of more than three words (from books, web, etc) ✓

- Given the sources of all pictures, data etc. that are not my own ✓
- Not made undue use of essay(s) of any other student(s) either past or present (or where used, this has been referenced appropriately) ✓
- Not sought or used the help of any external professional agencies for the work (or where used, this has been referenced appropriately) ✓
- Not submitted the work for any other degree or professional qualification except as specified ✓
- Acknowledged in appropriate places any help that I have received from others (e.g. fellow students, technicians, statisticians, external sources) ✓
- Complied with other plagiarism criteria specified in the Programme Handbook ✓
- I understand that any false claim for this work will be penalised in accordance with the University regulations ✓
- (For R2 & Thesis) Received ethical approval from an approved external body and registered this application and confirmation of approval with the University of Edinburgh's School of Health's ethical committee ✓

Signature *S. Johncock* (Electronically Signed on 23.08.2016) **Date** 23.08.2016 (amendments)

Acknowledgements

Primarily, I would like to thank all the participants who kindly consented to take part in this study and for being so open in sharing their experiences and thoughts about the time they spent in psychological therapy. I would also like to thank my colleagues in Older Peoples Psychological Therapies Service who took an interest in my project and recruited all the participants. I would especially like to thank my supervisors Dr Fiona Macleod and Dr Helen Nicholson-Langley from NHS Tayside Older People Psychological Therapies Service and Dr Helen Griffiths from the University of Edinburgh. I very much appreciated the guidance, discussions and timely feedback on all stages of this project.

My personal thanks go out to my friends and family for their support and patience! You have kept me motivated and my spirits up and forgiven me for my long absences into 'thesis world'! I would especially like to thank my mum for her support in spell checking, keeping me fed, putting up with my mood swings and encouraging me to keep going.

Unfortunately, my family lost a valued member during the weeks preceding submission. My Grandpa Jack was an inspiration to all who knew him and was one of the most independent, kind, patient and fun-loving older person I have ever met.

I dedicate this portfolio to his memory.

Older People's Psychological Change Processes

Contents

Front sheet / Title Page for Submitted Academic Work	1
D. Clin. Psychol. Declaration of own work	2
Acknowledgements.....	3
Chapter 1. Thesis Portfolio Abstract	7
Chapter 2- Older People's Perceptions of Psychological Change Processes	10
2.1 Abstract.....	10
Practitioner Points	11
2.2 Introduction	12
2.3 Research Questions / Objectives:.....	15
2.4 Method	15
Design	15
Participants.....	16
Inclusion criteria:.....	16
Exclusion criteria:	16
The Interviews.....	17
Analysis.....	18
Quality Control	18
2.5 Results	19
Summary of the Model	19
Further Detail of Constructs in the Model	21
Age as Context	21
Seeking Help & Entering Therapeutic Environment	21
Building the Therapeutic Relationship	22
Client Engaging with the Therapist.....	23
Therapist Engaging the Client	24
Developing a New Understanding	25
Therapeutic Changes	27
Timing	29
Post therapy reflections and commitments of continuation	30

Participants review of model.....	32
2.6 Discussion.....	32
Limitations of study & Directions for future studies.....	35
2.7 Conclusion	37
2.8 References	39
Chapter 3. Attachment in Older People: A Systematic Review	44
3.1 Abstract	44
3.2 Introduction	46
A brief history of attachment theory development.....	46
Attachment theory across the lifespan.....	46
The different traditions of measuring attachment.....	47
The stability of attachment across the life span	49
Is attachment theory applicable to older adults?	51
Measuring attachment in older adults	51
3.3 Aims of the current review.....	54
3.4 Method	54
Inclusion and exclusion criteria	54
Search strategy.....	55
Developing a Quality Criteria Rating Checklist for a systematic review of observational studies.....	56
Quality Criteria Rating Checklist	58
3.5 Results	58
Characteristics of the studies	58
Population Characteristics	59
Measurement of Attachment	59
Does Attachment Change across the Lifespan?	64
Is Attachment a Universal/ Biologically Pre-programmed system?	65
Dimensions of Outcome in relation to Psychological Adjustment and Affect	67
Quality of Studies	69
3.6 Discussion.....	70
Aims.....	70
Summary of results	70
Theoretical approaches to measurement of attachment.....	71
Comparison to other reviews.....	75

Synthesis of findings.....	77
Suggestions for future research.....	77
Limitations of this current review.....	78
3.7 Conclusions	78
3.8 References	80
Chapter 4 - Appendices.....	89
Appendix 1 - Psychology and Psychotherapy: Theory, Research & Practice – Author Guidelines..	89
Appendix 2 – Ethical Approval	94
Appendix 3 – Participant Information Sheet	98
Appendix 4 – Consent Form.....	107
Appendix 5 – Demographic Questionnaire.....	109
Appendix 6 – Interview Schedule/ Topic Guide.....	113
Appendix 7 – Change Process Model.....	114
Appendix 8 - Author Guidelines – Clinical Psychology Review	114
Appendix 9 – Study Characteristics Table	128
Appendix 10 - Study Quality table	134
Appendix 11 - Measures of Attachment.....	136

Total Word Count (minus references and appendices): 15,432

Chapter 1. Thesis Portfolio Abstract

Objectives. The empirical qualitative study explored Older People's (over 65 years of age) perceptions of psychological change and the processes by which these occurred. It also aimed to add to understanding of the barriers to therapeutic change. Subsequently, a systematic review of the current literature pertaining to older people's attachment styles, and how attachment is measured within this population, was conducted. This scrutinised the literature regarding role of attachment (as a trans-diagnostic construct) in old age, as this may influence their change processes.

Design. As the empirical study was exploratory, it adopted a Grounded Theory methodology, influenced by the constructivist perspective as described in Charmaz (2014). Data was obtained via semi-structured interviews, with the later interview schedule grounded in emergent codes and memos of earlier interviews. Literature pertaining to older people, attachment, and how attachment is measured, was obtained from a systematic review.

Method. Twelve participants were interviewed using a semi-structured interview, following discharge from an Older Peoples Psychological Therapy Service, for the empirical project. Participants were aged 65 years or over and had received varying models of therapy over varying durations. Those reporting improvement, or no change, as a result of receiving psychological therapy, were approached to participate. Through detailed analysis, a tentative model of older people's psychological change processes was constructed. This model was further checked by some participants for quality control. Subsequently the systematic review explored a key theme of attachment (as suggested by the categories highlighted in the empirical project). Literature regarding attachment, older people and how

attachment is measured within this population, was obtained through a systematic search through major databases, compared against a checklist, constructed for this review, with all analysis prorated by qualified clinical psychologists supervising this study.

Results. Interview transcriptions were analysed in line with a constructivist perspective of grounded theory. A non-linear model of psychological change, grounded in the data, was constructed. The main concepts of the model were Age as Context, Seeking Help and Entering the Therapeutic Environment, Building a Therapeutic Relationship, Developing a New Understanding, Therapeutic Changes and Post Therapy Reflections and Commitments of Continuation. In addition, some similar processes were highlighted across different therapeutic modalities, thus supporting trans-theoretical models of psychological change. In addition, the model highlighted a theme of models of relationships having continuity through the lifespan (as evidenced in the concepts of Seeking Help and Building a Therapeutic Relationship). This echoed the trans-therapeutic concept of attachment. Therefore, a systematic review of attachment in older people was conducted. Overall the quality of the literature pertaining to attachment, older people and how attachment is measured within this population was poor. There was a paucity of evidence of minimisation of bias reported in either design or analysis.

Conclusions. The empirical project demonstrated the process of psychological change in older people is non-linear in nature. Some constructs of change were similar to those found in the adult literature, but there were also some constructs relating specifically to ageing, and the theoretical developmental stage of old age. This supports suggestions that age specific constructs should be held in mind when working therapeutically with older people. The systematic review found research

exploring attachment in older people is a growing field of research, but one which is still in its infancy compared to other clinical populations. In addition, several studies had serious methodological issues and therefore readers are encouraged to interpret their results with caution.

Chapter 2- Older People's Perceptions of Psychological Change Processes

2.1 Abstract

Objectives. This study explored older people's perceptions of psychological change processes, including factors facilitating and barriers to change.

Design. Due to the exploratory nature of this study, a grounded theory methodology (Glaser & Strauss, 1967) was utilised, heavily influenced by the constructivist approach posited by Charmaz (2006, 2014).

Method. 12 participants were interviewed after discharge from receiving therapy from an older people's psychological therapy service. Transcripts were analysed while further interviews were undertaken, as per the iterative approach inherent in grounded theory methodology.

Results. A model was developed which was grounded in the data. This model describes a non-linear process of change, containing the following constructs: Seeking Help/Entering the Therapeutic Environment, Building the Therapeutic Relationship, Developing a New Understanding, Therapeutic Change, Post Therapy Reflections and Commitments of Continuation. This model of the process of change was encompassed in a construct of Age as Context.

Conclusions. All participants described some element of psychological change. The majority reported change occurred prior to discharge, however one participant experienced psychological change post discharge. Although no questions were asked about ageing, it was found to be not integral to the change process, but a context which should be kept in mind by clinicians. This model presents a non-linear

process of change which supports developmental theorists' views of ageing. This was a small exploratory study and therefore presents further research recommendations.

Practitioner Points

- Practitioners who work therapeutically with older people should keep age and ageing in mind as a context within which therapeutic change occurs.
- Practitioners should consider building the therapeutic relationship as a key element of therapeutic change. It is important to consider the circumstances which led to the older person's referral into the service as this can influence clients' uncertainty at the start of therapy which can directly impact upon clients' engagement in therapy.
- Practitioners should note that the process of therapeutic change for older people is a non-linear, iterative process. Change is an outcome but also part of the process.
- Practitioners should consider explicitly acknowledging changes that the client has already made as this can contribute to raising the client's confidence which in turn results to further psychological changes.

The empirical project (Older People's Perceptions of Psychological Change Processes) is written following the author guidelines for the journal Psychology and Psychotherapy: Theory, Research and Practice. However, for ease of reading, the figures and tables are included as part of the text, as opposed to in the appendices as recommended in the guidelines. The word count of this project (excluding abstract) is 6,531.

2.2 Introduction

The psychological therapies access HEAT target¹ (Scottish Government, 2014) aims to ensure people in psychological need receive timely, appropriate treatment, applicable to all age groups. However, the Older People's Psychological Therapies Working Group, (2011) found Scotland was missing this target, with 80% of older people with depression receiving no pharmacological or psychological treatment. In comparison to adults under 65 years, the evidence base for effective therapies for those over 65 years is as yet small. This does not doubt therapies are effective (see The Matrix, 2011), but reflects the gap in services available for this age group.

The effectiveness of an intervention established through randomized control trials (RCTs) may be seen as the 'gold standard' of outcome research for clinical practice (Martinson *et al*, 2010), but fails to explore how or why this is, unlike change process research. Change Process Research aims to establish the process by which the intervention outcome is effective (Elliott 2010). A vast range of studies have been published under the banner and contributes towards our understanding of what it is about therapy that works. This insight enriches our abilities as specialist clinicians to improve our practice. However, it should be noted that thus far, this important area of research has not been undertaken with older people. Given the requirement of equality of provision regardless of age (The Equality Act, 2010) this proposed study is timely and appropriate.

In the adult literature several studies are based upon trans-diagnostic and trans-treatment modality approaches (Higginson & Mansell 2008). These studies assume common processes occur within the development, maintenance and recovery from

¹ Health improvement, Efficiency, Access and Treatment (Scottish Government, 2014)

psychological problems. They argue that different modalities of therapeutic approach are accepted as effective in reducing psychological distress, and therefore trigger, or facilitate, the same factors that provide relief from different psychological difficulties (e.g. Binder, Holgersen & Nielson, 2009). Interestingly, when collating emerging themes from studies based on specific types of therapy and presenting problems, with research into more trans-diagnostic and trans-therapeutic modalities, it appears similar change processes and factors are highlighted irrespective of specificity of study methods. These studies set out to identify change facilitating factors in different ways however, similar factors emerged, regardless of the parameters of the study or research questions. This does suggest that similar processes underlie therapeutic change, and therefore change process research can be conducted both trans-diagnostically and trans-therapeutically, albeit within an adult population.

Research into effective psychological therapy implies therapy should be 'tailored' to the population, accounting for different contexts through which individuals perceive the world (Knight, 2009). The Older People's Psychological Therapies Working Group (2011) recommends that if older people do not require specialist services they should be seen by general adult psychology services. However those who require specialist services should expect to receive assessment and treatment that considers the "5 C's". Sadavoy (2009) defined the "5C's" of older people specialist services as Complexity, Chronicity, Comorbidity, Continuity and Context. Often several interacting factors can make older people vulnerable to psychological disorders, therefore the complexity of their difficulties should be considered when assessing and treating these disorders. According to Sadavoy (2009) psychological disturbances tend to be more chronic for this age group, lasting for a longer duration

and requiring longer maintenance phases of treatment. Older people often have multiple co-morbidities which may contribute to the development of psychological distress. Also psychological distress may impact upon different co-morbidities. Continuity refers to the lifelong cumulative effect of an older person's environmental, physiological and psychological development. Sadavoy (2009) recommends a longitudinal approach should be adopted when assessing psychological disorders. The final "C" is context. This posits that psychological distress does not occur in a "vacuum". Thus psychological disturbance cannot be separated from the physical, psychological, social and environmental context in which it occurs. Although any of these "5 Cs" could be relevant for some patients in adult mental health services, all 5 are more likely to be implicit in a large number of older people in psychological distress. For example, physical health conditions have been demonstrated to exacerbate psychological problems (e.g. Ormell et al, 1997). In addition, although chronicity may be present in a general adult population, the duration of this is likely to be much longer in older people. As opposed to having a chronic problem for 10 or 15 years in a general adulthood, older people may have had the difficulty for 60 or 70 years, therefore problems may be much more entrenched. It is also very likely that older people have had to adapt to several different stressors e.g. physical health deterioration, losses in one's support system or traumatic life events. Older people may also hold different beliefs about seeking help for psychological problems (see Mackenzie, Gekosi & Konx, 2006). Therefore, for therapy for older people to be effective, it may also require adaptation for age (Evans, 2007, Knight, 2009 & Sadavoy, 2009). Given the literature suggests psychological assessment and treatment should be amended in specialist older people's psychological therapies services, it is questionable to assume older people's change processes will mirror

those from adult research. If the therapeutic assessment and intervention received by older people may be different, it is likely that older people's experience and perception of psychological change will differ from that of younger adults.

This study examines perceptions of older people who attended therapy, the key factors facilitating therapeutic change, and the process by which change occurred. Findings will assist clinicians in understanding processes involved in older people's therapeutic change.

2.3 Research Questions / Objectives:

1. From the perspective of older people, how does therapy result in therapeutic change? How do older people describe the process of change?
2. What are the key factors that facilitate or hinder therapeutic change?

2.4 Method

Design

This study was exploratory in nature and investigated psychological change processes within an older people population. The qualitative research design followed the procedure described in 'Constructing Grounded Theory' (Charmaz, 2006, 2014). In line with development of grounded theory (GT) in 1967 by Glazer and Strauss, this methodology was chosen as it moves beyond simple description of phenomena. It encourages robust analysis of data using an iterative process, to develop an explanatory theory, grounded in context (Starks & Brown- Trinidad, 2007), and not through predetermined categories.

Data was gathered from 12 in-depth interviews with older people attending psychological therapies services for therapy. Using the GT process of simultaneously gathering data, whilst analysing previous data, a model was developed, (Charmaz, 2014). On completing all interviews, the first author shared the initial proposed theoretical model with some participants, to challenge or validate it.

Participants

This study was approved by the East of Scotland NHS Research Ethics Committee. All individuals meeting inclusion and exclusion criteria (Table 1) were approached by their qualified Clinical Psychologist, in their last therapy session. All discharged from the Older Peoples Psychological Therapies Service during the research recruitment period were invited, regardless of level of perceived change.

Inclusion criteria:	65 years or older (no upper age limit); received psychological therapy for any mental health problem; therapy delivered one-to-one by a qualified Clinical Psychologist; English speaker (this study was unable to utilise a translator); considered by clinician to have capacity to consent to research.
Exclusion criteria:	those with evidence of substance misuse; a diagnosis or suspected diagnosis of significant cognitive impairment (e.g. dementia, brain injury, learning disability or stroke); significant sensory impairment with adverse impact on communication; no capacity to consent to participate in research; referred for psychological assessment only; discharged due to lack of attendance at sessions

Table 1: Inclusion and Exclusion Criteria

19 potential participants opted in, however three could not be contacted, two changed their mind, one did not attend, and one had received part of their therapy

from the first author, so were excluded from the study. Thus 12 participants (see Table 2) met inclusion and exclusion criteria.

	Age	Sex	Presenting Problem	Treatment Modality	Sessions Attended (Offered)	Level of Change Indicated	Education	Occupation Current or Previous
Kate	65-75	Female	Depression & adjust to family stress	CBT	8 (8)	Much Improved	High school	Retail
Janet	76-85	Female	Anxiety & trauma (RTA)	CBT	27 (28)	Much Improved	College	Education
Agnes	65-75	Female	Depression & caregiver stress	CBT	19 (20)	Very much Improved	High school	Current Carer
Hazel	65-75	Female	Anxiety, depression & child trauma	Compassion focussed therapy	11 (12)	Very much Improved	High school	Retail
Esther	65-75	Female	Grief (death of son)	Bereave-ment counselling	7 (7)	Very much Improved	High school	Sciences
Gina	65-75	Female	Anger & low mood	CBT	12 (12)	Very much Improved	High school	Carer
Isobel	65-75	Female	Depression – prolonged grief	CBT	7 (8)	Much Improved	High school	Unknown
Les	65-75	Male	Anxiety and depression	CBT	12 (13)	Much Improved	University	Civil service
Bill	76-85	Male	Phobia	CBT	7 (7)	Very much Improved	High school	Manual
Claire	65-75	Female	Anxiety and depression	Mindfulness based CBT	14 (14)	Very much Improved	College	Medical
David	65-75	Male	Anxiety & cog difficulties	CBT	5 (5)	Much Improved	College	Business
Fred	76-85	Male	Adjust to loss	CBT	13 (13)	Minimally Improved	High School	Manual

Table 2: Participants' demographics (pseudonyms used to preserve anonymity)

The Interviews

Semi-structured interviews of 40 - 60 minutes, were audio recorded and followed an interview protocol (see appendix 6 Interview Schedule/Topic Guide). In adherence to GT principles, this 'protocol' was flexible and evolved as more codes emerged during

data collection and parallel coding. The interviews were conducted, transcribed and coded by the first author.

Analysis

The analysis was heavily influenced by the constructivist approach (Charmaz, 2014).

Analysis commenced with initial coding to find categories (descriptive) and progressed into comparative focused coding. Parallel to coding, memos noted conceptual links, forming the basis of the emerging theory and amendments to subsequent interview protocols. Memos and focused codes were constantly compared to previous codes and interview transcriptions, to check for a good fit with initial codes and raw data. This iterative process is pivotal in GT (Charmaz, 2014). Recruitment ceased when codes approached saturation. The emergent codes allowed construction of a tentative theory/model grounded in context.

Quality Control

The second, third and fourth authors audited codes and model emerging from raw data. This procedure ensured analysis was conducted both systematically and rigorously. Once focused codes evolved into an emergent analytic theory, this was shared with three participants who had agreed to comment on theory development.

It is acknowledged all the authors may hold preconceived hypotheses regarding possible emergent theories, due to extensive experiences within Clinical Psychology. Therefore not only were findings discussed and agreed regularly between authors, but credibility was increased by the contribution of participants' feedback.

2.5 Results

Constant comparative analysis led to the development of a model of the therapeutic change process from older people's perspectives. High level constructs in the model were developed from categories drawn from coded experiences and perceptions.

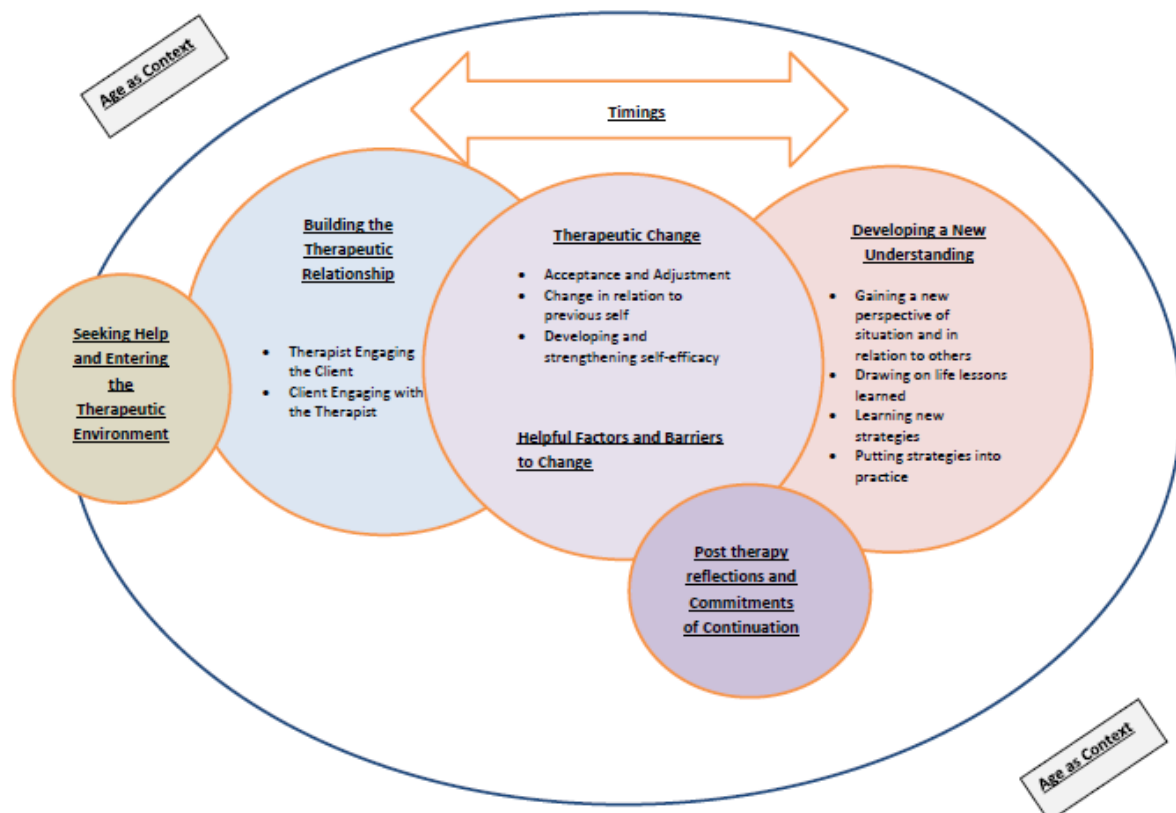


Diagram 1: Model of Older People's Psychological Change Process

Summary of the Model

The process of change in psychological therapy for older people is not linear. The results highlight **help seeking** cognitions and behaviours contributed towards referral to psychological therapy and **entering the therapeutic environment**. These cognitions and route of entry into the therapeutic environment fed into building the therapeutic relationship. **Building the therapeutic relationship** is a 2 way engagement construct: the therapist had to engage the client, but the client also had to engage with the therapist.

Developing a new understanding involved gaining a new perspective of triggers of distress, and consideration of self in relation to others, drawing on life lessons learned, learning new strategies and putting this knowledge into practice.

Both building the therapeutic relationship and developing a new understanding led to therapeutic changes. The **therapeutic changes** included acceptance & adjustment, changes in relation to the previous self and developing/strengthening self-efficacy.

Therapeutic changes are not only the outcome of therapy, but also part of the **therapeutic change process**. Noticing the changes often led to further building the therapeutic relationship, and developing new understanding, leading to further therapeutic changes.

In addition **post therapy reflections** contribute towards further therapeutic change and further developing of understanding. Participants gave **commitments** to further develop their understanding, through continuing to put the strategies learned into practice post therapy.

Participants discussed both sudden realisation and gradual change in **timing** of therapeutic changes, however they also highlighted that having the right duration of therapy for change to occur was important.

This interlinked process took place within a wider construct of **age as context**.

Participants described age as context in each construct, as an important conceptual backdrop to therapeutic change within this older population.

Further Detail of Constructs in the Model

Age as Context

Ageing was linked with physical health and social changes, including pain and bereavement. Some participants found it surprising to be referred to an older people's service as they did not consider themselves an 'older person'

"and the letter came in - older people psychology? Oh aye, I don't think I am an older people yet (laugh) but I am....you feel 21 with 40, 50 years' experience"
(Esther).

Some participants described being treated differently by healthcare professionals. However, whereas Claire reported a sense of over-prescribing to "fob off" older people, Les had a different view *"It's all about my age, she {psychiatrist} won't put me on the full dose because of my age, which I think is a lot of Ballyhoo"*.

Although age and ageing did not form a distinct part of the change process model, it was undeniably a context influencing how they lived their lives, received and related to treatment.

Seeking Help & Entering Therapeutic Environment

All 12 participants were referred by GP to the Older Peoples Psychological Therapies Service but the circumstances of this referral differed. Fred thought his GP must have seen he was *"feeling trapped"* and therefore referred him, whereas Claire proactively sought a referral to psychology to receive a specific therapy. David had a very different experience, sitting a memory assessment and on *"failing"*, was referred to psychology:

"I thought I would be going to see {therapist} because I made a mess of it. You know I thought. That is me I am definitely going to be seeing..., cos the report would be going in that I was not very good" (David)

Some participants were unsure if it was a psychologist they needed.

"..then again maybe I got the wrong...because she's a Psychologist. Maybe it's a Psychiatrist I'm needing. To sort myself out." (Janet)

"At first, When the doctor first said a psychologist (laughs) I thought I dinnae need a psychologist ye ken, so I was a wee bit apprehensive at first". (Esther)

Several participants were apprehensive or worried at the start of therapy, being unsure what to expect but this improved over time. The circumstances of referral, whether help was sought or imposed, impacting upon the initial stages of the therapeutic experience.

"When you first go you are so overpowered it is hard to take in what anyone is saying to you" (Hazel)

Building the Therapeutic Relationship

As participants described change and helpful factors, they emphasised the qualities of the therapist and the relationship between therapist and client. Participants perceived building the therapeutic relationship as a primary element of their therapeutic change process. Building the therapeutic relationship overlaps with entering the therapeutic environment, particularly in terms of hope, expectation and apprehension, influencing help seeking.

The therapeutic relationship involves a mix of therapist and client qualities, the therapeutic relationship and therapist position. Participants described engagement and taking an active role in therapy, as key to the process of change.

Building of the therapeutic relationship has two main tasks: the client engaging with therapist and therapist engaging client.

Client Engaging with the Therapist

Opening Up

In order to engage with the therapist, participants reported opening up as part of building the therapeutic relationship. Although apprehensive, Esther found as time went on, she began to feel safe, and could “*open up*” to the therapist and the therapist was then able to offer different views, which led to her perspective shift.

“but I could speak to the therapist. Well, it was scary first of all, because they were neutral, they didn’t know anybody I was speaking about or what I was speaking about, but they understood how I felt and it made me feel that the feelings I was going through were quite normal in the circumstances, instead of being..erm..not that it was guilt, it was anger, it was all the different emotions I went through, but they helped me to look at things in it in a slightly different way” (Esther).

Gradually developing trust/confidence in the therapist led to opening up, but also opening up more, increased their trust/confidence with the therapist.

“I was getting to know her, you know what I mean and I got to speak more to her you know, and just open up and then latterly with any problems I could speak to her at all ... I felt more confident in what I could chat to her about and I didn’t hold back I really didn’t at all” (Agnes).

Fred felt he was open from the start. *“I must admit at first I was quite relaxed and we talked a lot of personal things, you know, ken, and it’s no secret I didn’t mind talking about how I was feeling and things like that , I always get the impression that people are or I want people to be sympathetic of me. I mean I always blurt it out you ken. And I have been doing that to therapist, to my doctors.”* Fred reported minimal therapeutic change and therefore the stage at which you 'open up' could be important to the change process.

Client Engagement in Therapy

Several participants reported the importance of following advice, e.g. Agnes: *“I really took what she was saying on board what’s she’s saying to me and I did I really did, cos there was no point in going if I didn’t it would be a waste of her time and mine”*.

Conversely Fred thought his therapy was not successful due to lack of engagement: *“I did feel like I wasnae, you know , being honest with herwe were both saying, she used to say to me, ‘you promised though’ we shook hands on it see, and I said aye you ken.... But I kept putting it off, and no doing it ken”*.

Therapist Engaging the Client *Therapist Qualities*

Therapist qualities are an element of the therapist engaging client. Participants all spoke highly of their therapist: *“brilliant”* (David); *“likeable and cheery”* (Fred); *“excellent”* (Claire); *“calming”* (Agnes); *“easy to speak to”* (Gina) & *“very good”* (Isobel). Participants felt safe within the therapeutic environment, where they could speak about anything, ask questions and where *“nothing was a bother”* (Esther).

Therapist as Guide and Companion through the Process of Change

The therapist was seen as on the same wavelength and well matched with the client. The therapist was also seen as a guide and teacher who gave 'good advice' and offered different views on the client's situation.

"Just different things that we hadn't thought about or hadn't thought about in the way {therapist} put it across, that made me think. Oh well yes there is something in that, you know" (Esther)

The therapist position within the relationship was also indicated. Confidentiality was important and knowing feelings were understood, 'allowing' them to get upset in front of the therapist, as opposed to family.

The therapeutic relationship needs mutual trust or reciprocal confidence. *"I had complete confidence from day one.... I think the confidence came within so I can do that no bother now and I just did it. I surprised myself. Again it comes back to the doctor and the confidence I think. I think it was the doctor had faith in me. I think that is where it came in and that transferred. You felt yourself 'oh I can do that no bother' and before you couldn't do that."* (Bill)

"It is about having the confidence, I feel more confident to manage the anxiety. {Therapist} said 'I don't think you will go as low as before'. When a professional tells you something you believe them... she thought I had improved, although she didn't actually say that, I thought I could tell that was what she was thinking." (Kate)

Developing a New Understanding

Gaining a new perspective and considering self in relation to others is connected to 'opening up' and growing 'awareness of the problem', with a two-way connection with 'self in relation to others', feeding into the reported therapeutic change. 'Self in

relation to others' can have different positions. For David it had a role of normalisation leading him to develop acceptance. Esther gained a sense of not being alone in the process of change as her therapist facilitated a perspective shift in relation to self and others.

Drawing on Life Lessons Learned

Both Agnes and Esther realised advice from the therapist was similar to common sense, as they already knew the information in the '*back of their mind*'. The therapist did not 'teach' anything new, but highlighted 'lessons' already learned. All participants were 'older people', and had minimal other episodes of care. They had managed without therapy up until referral, drawing on life lessons learned. Claire felt CBT "*brought home*" getting in touch with thoughts and behaviours. David realised he had been "*doing psychology*" for years through previous work roles, considering this gave his therapy a 'head start'.

Learning New Strategies

Participants identified new strategies suggested by therapy. David went from "*not knowing how to handle it, to knowing how to handle it*". David and Gina identified practical tips, such as prioritising tasks and focusing on one task at time, as important. Bill developed a knowledge of "*what to do with it [anxiety]*" and Claire was "*hungry for more information...developing a deeper understanding of skills*".

Putting Knowledge into Practice

Participants reported using strategies outside of the therapeutic environment as vital. "*finding it interesting is not enough – you need to practice doing it*" (Claire)

They also emphasised the importance of continuing with the strategies:

“well, I’m not boasting but I did try to do them as often as she suggested, to begin with I thought this is a waste of time but as you progressed and the more often you used the tape you began.. by the end I used to find it difficult to lift my hand I was just so relaxed!” (Janet)

Participants who noted either the discontinuation of therapeutic changes following therapy or lack of therapeutic change highlighted that they had not put the strategies suggested into practice (e.g. Fred), or had ceased to do so (e.g. Isobel). Fred identified a downward cycle where he would say he would do something, not follow this through, then feel he disappointed the therapist, further lowering his mood. However he noted after therapy, by doing suggested strategies, he was now noticing therapeutic change.

Therapeutic Changes

Acceptance and Adjustment

As a result of the process of therapy (Building the therapeutic relationship and Developing a new understanding) several participants noted developing acceptance of their situation, adjusting to circumstances, or taking things as they come and being able to *“let it go”* (Claire, David, Esther, Fred, Kate and Hazel).

“What I have learned to do is, instead of taking that hurt with me, let go of it and get on with my life.” (Hazel).

Change in Relation to Previous Self

Some participants entered therapy hoping to return to an improved self. All mentioned changes in relation to the ‘previous self’ who entered the therapeutic environment. Participants noted changes in the way they thought about themselves and their needs (e.g. Agnes and Esther). Claire and David “put aside” punishing

themselves and Bill put all his problems behind him. Some described themselves as a completely different person in comparison to before therapy.

David's emotions changed from "*defeat to hope*". Agnes, Bill, Claire, David and Esther, all developed a sense of calmness, through looking at life differently (gaining a new perspective –in Developing a new understanding). Seeing things differently (gaining a new perspective) fed into noticing changes in relation to previous self. Thus change in relation to previous self is not only a result of therapy, but also part of the process of therapeutic change. Participants became aware of changes occurring in relation to their previous self, and this awareness led to further changes.

Developing and strengthening self-efficacy

Many participants developed confidence (Agnes, Bill, Claire, Fred, Kate, Les and Janet) from building the therapeutic relationship, but also due to the new understanding they developed about how to '*handle*' their '*problem*'. This is interpreted as developing and strengthening existing self efficacy.

Participants also developed courage (Claire), became stronger (Agnes), regained control (Bill) and improved self-esteem, as a result of increasing confidence in their abilities. Esther identified "*seeing I was getting there*" helped to develop therapeutic change. However this process was not always described as an easy one.

"It was a struggle but I did it, I was quite chuffed with myself – I just thought I can do this" (Janet)

Helpful Factors and Barriers to therapeutic change

Helpful factors facilitating therapeutic change were: having things to read/ having things written down (Claire & Janet), having things to look forward to (Fred), doing the homework/practicing strategies outside the therapeutic environment (Claire,

Janet and Esther), having practical help resulting in reduced stress (Esther) and feeling safe (Claire, Esther and Agnes).

Barriers to change were, for Fred, his own lack of engagement with the therapist and not following advice. He *“broke promises”* made to the therapist, lacking confidence/self efficacy, and therefore *“put off”* taking action. Although Gina did not identify barriers to change she found it more difficult to develop the therapeutic relationship, as she was unable to ‘know’ the therapist. She felt the relationship was not balanced and did not feel that she had noticed many changes as a result.

“I did open up and she is a good listener but I never got to know her. If I asked her anything she just...[waved hand in a ‘dismissive’ gesture]. But then I’m a people’s person I like to get to know people. But that was a funny one and I did speak to my friend about it and she said they’re trained to do that. You won’t get any information out of her.” (Gina).

Despite these barriers, some level of therapeutic change was indicated by all participants.

Timing

There are two elements to the timing construct – time taken for therapeutic change to occur, and the time point when change happened.

Given appropriate time

All were given appropriate time for change to occur and no one thought therapy ended too early. Esther thought not rushing *“taking wee steps”* was the right pace for her. Agnes, Claire, Janet, Kate and Bill all agreed they were given enough time in therapy to make changes. However there was no consensus of the appropriate timeframe for change. The number of therapy sessions varied from 5 to 27. In

addition participants were conscious of the duration of their therapy in relation to peers or their own expectations. But again, this differed between participants, Bill was “*surprised it was so quick*” whereas Janet asked, “*this is taking an awfy long time, no? And (therapist) said ‘no you are making progress’*”.

Discharge was decided either by the therapist (with client agreement) or by the client requesting it. Therapy ended was when it became repetitive, the client became ‘their own therapist’, doing strategies on their own, or therapy is not achieving therapeutic change.

When his therapist suggested ending therapy, Fred agreed and “*didn’t see the point in continuing it*”. Whereas Esther requested ending therapy as she felt continuing therapy would become counterproductive as it was “*going over the hurt again*” and they (herself and her husband) had “*gone as far as we could go... it is up to us now*”.

Timing of change

There was no consensus as to when change was noticed. Some noticed changes gradually, as they relaxed into therapy (e.g. Agnes), whereas others suddenly became aware of differences (e.g. David).

Post therapy reflections and commitments of continuation

Once the client left the therapeutic environment there was evidence of further reflection and commitments to continue with strategies and advice. Post-discharge, clients were aware “*it’s up to us now*” (Esther), knowing they have responsibility for continuing work begun in therapy. Even Bill, who still felt “*part of the illness*”, was making plans to continue exposure work. Kate continued to have trust in the therapist, but felt further therapeutic change was required afterwards:

“I felt calmer, I am on the road. I’m sure she wouldn’t have discharged me if she thought I couldn’t cope” (Kate)

Claire realised she still has a *“long way to go yet”* but *“there is no going back now – keep moving forwards”* stressing *“the journey belongs to you”*. Janet at point of discharge was uncertain initially, but increased confidence after reflecting on therapy.

“I really felt out on a limb, a wee bit scared, how am I going to do this on my own? But then I thought about it, she’d given me all the strategies and what I should do and it was up to me to do them. It was on my shoulders. It was a two sided, you felt this is an achievement but apprehensive too”. (Janet)

Upon reflection of therapy, some felt it easy and simple, others found the process more difficult. Bill didn’t know why he *“didn’t do it sooner”*. However all participants would recommend seeing a therapist to others, and reported some level of improvement. For most, changes were noted during therapy, but for some, the biggest impact was change developed post therapy (e.g. Fred). Differing magnitudes of change were reported and this could be a result of the differing complexity of presenting problem and length of treatment (i.e. Bill stated it was a *“huge change”* was treated for simple phobias over 7 sessions and Janet described her change as more *“subtle and gradual”* and was treated for anxiety/trauma for 27 sessions).

Post therapy reflections and commitments of continuation were demonstrated as a result of therapeutic changes and by continuing to develop a new understanding. What is less clear is the role of the therapeutic relationship post therapy. There is evidence of the belief and trust therapists had in clients, improved client’s self

efficacy, resulting in confidence to continue therapeutic work outside the therapeutic environment, which further developed their belief in self.

Participants review of model

Following analysis, the model of psychological change processes was shared with three participants for quality assurance. All three felt the model was representative of their perceptions of psychological change.

“that’s exactly it” (Kate)

“I didn’t change all that much, but maybe that’s because I didn’t feel the relationship I had with {therapist} was two-way. Maybe that was what was missing?” (Gina)

“You are right age doesn’t create all the problems but it is definitely there... you don’t get to my age without learning a few things along the way!” (Les)

2.6 Discussion

Entering the Therapeutic Environment

Entry to therapy for all participants was by GP referral, however circumstances differed. The route to referral influenced level of apprehension and start of therapy. The therapeutic relationship with GPs is important in identifying need for therapy. This follows help seeking in older people literature and echoes Mackenzie, Gekoski and Knox’s (2006) finding older people have a favourable intention to seek help from primary care practitioners, but also possible barriers to seeking help, due to fear of the consequences, (Walter, Iliffe & Orrell, 2001). This was particularly relevant for David who experienced taking, and *‘failing’* a memory test, believing this was why his GP referred him to clinical psychology.

Building the Therapeutic Relationship

Positive aspects of the therapeutic relationship were found similar to the adult literature, such as the 'listening therapist' (Clarke, Rees & Hardy, 2004), 'interaction with the therapist' (Carey et al 2007), 'having a relationship with a wise warm and competent professional' (Binder, Holgersen & Nielson, 2009), and 'personal contact' (Llewelyn et al, 1988). However this study shows older people perceived reciprocal engagement alongside the qualities, behaviours and position of both themselves and therapist to be important in building a therapeutic relationship.

Developing a New Understanding

Developing a new understanding could be linked to 'understanding or altering ones thoughts and beliefs' identified as facilitating psychological change in the adult literature (Clarke, Rees & Hardy 2004, Orford et al 2006 and Higginson & Mansell 2008). Within developing a new understanding, learning new strategies and putting strategies into practice categories are reflective of the 'practical/ doing' aspects of therapy seen as 'testing things out' (Clarke, Rees & Hardy 2004), 'tools and strategies' (Carey et al 2007) and 'keeping it real' (Rayner, Thompson & Walsh 2011). However, drawing on life lessons learned was as important for the older people in this study as learning new approaches.

A Trans-diagnostic and Trans- therapy, non-linear model of change

Most, but not all, older people in this study had CBT, and yet similar change processes were found. This suggests similar processes underlie older people's therapeutic change, and therefore change process research can be conducted both trans-diagnostically and trans-therapeutically with an older people age group.

The process described by older people in this study somewhat fits with assimilation theory (Stiles et al,1990) wherein there was a catalyst/ problematic experience (circumstances of referral, leading to help seeking and entering the therapeutic environment) which was then assimilated into 'schemata' (developing a new understanding) which developed in the interaction between therapist and client (Building the therapeutic relationship). However Stiles et al (1990) also define 'stages' which the client moves through whilst assimilating problematic experiences, suggestive of a linear process. In contrast, the model proposed in this paper is a non-linear one, echoing Hayes et al (2007) review, challenging linear, gradual perceptions of therapeutic change.

Post therapy Reflections and Life Review

Reviewing past experiences is a concept that is common across developmental theorists' perceptions of ageing (see Ashford & LeCroy, 2009 for further details). Erikson's (1959/1980) 8th 'life stage' is characterised by the developmental task of integrity versus despair. This life stage takes place in older adulthood, 60 years old and onwards, involving reflection and increased introspection. If through this reflection the individual is satisfied their life has been both rewarding and meaningful, they achieve integrity but if not, are vulnerable to despair. In the current study, post therapy reflections contributed to the non-linear shape of the model and this construct may be more prominent within older people compared to younger adults, reflecting the developmental stage of old age.

Age and Ageing as Context

A major assumption of this study is that the therapeutic process may be different for older people, due to adaptations made to therapies by clinicians, (e.g. Knight, 2009,

Laidlaw et al, 2003, Laidlaw & McAlpine, 2008, Satre, Knight & David, 2006, & Evans, 2007). These authors suggest when working therapeutically with older people additional factors need accounted for, due to 'cohort effects'. A cohort effect is shown in having different needs, differing ways of looking at themselves, others and the world. A client raised during 1920s and 1930s is likely to have different views of mental illness or help seeking than younger adults. In addition older people in general face different challenges to younger adults due to loss, health problems and co-morbid difficulties. Study participants reflected these issues.

Although this study did not specifically ask about impact of ageing, or age differences in therapeutic experiences, age was raised by participants. Ageing was not discussed as an integral part of the change process, rather a context within which the therapeutic process sat. This follows Laidlaw et al (2003) and Laidlaw & McAlpine (2008) recommendations that therapists may not have to make significant adaptations to therapeutic treatment, but should hold age specific contexts, e.g. cohort effects, in mind whilst working with this population.

Limitations of study & Directions for future studies

This study relied upon participant's memory, therefore faced potential hindsight bias or failure of memory to recall when or how change happened. This explorative study looked at the whole change process, therefore was conducted after therapy finished, with interviews within a month of discharge to minimise this risk. Post therapy reflections and commitments of continuation were considered integral to the process of change, and had interviews been conducted earlier, this element may have been overlooked.

Future older people studies examining change processes during progression of therapy may clarify timing of changes, and confirm if therapeutic change is a linear staged process or more discontinuous, as seen in this study and by Hayes et al, (2007).

Although perceptions of change were recorded, it used no formal measure of outcome, in terms of quality of life or symptom reduction. Further studies are required of links between perception of psychological therapeutic change processes and therapeutic outcome. Although poor engagement was suggested to be linked with poorer outcomes this was not thoroughly investigated.

Although this study suggests a trans-theoretical model is valid for older people, the majority of participants in this study received CBT. However those who received a different therapeutic intervention also followed the model. Further research with a more diverse range of therapeutic modalities, such as behavioural (e.g. ACT) and relational (e.g. psychoanalytic) based therapies would further examine if this core therapeutic process is trans-theoretical.

Although building the therapeutic relationship was demonstrated to be integral to the therapeutic change process, only one 'side' of this relationship was investigated. Given therapist and client perceptions of helpful factors of therapy may differ (Llewelyn, 1988), it is possible their perceptions of building the therapeutic relationship may also differ. Participants described a mutual process of therapist engaging the client and client engaging with therapist. Further research examining therapist/ client pairs could investigate this process in more depth.

The study had no upper age limit however the majority fell within the 65-75 year old age group, with none over 85. Developmental theorists Newman and Newman

(2006) separate later life into two different developmental stages: late adulthood (60-75 years old) and very old age (75 years old until death). Similarly, Erikson and Erikson (1998) extended Erikson's (1980) life cycle theory to include a 9th stage which encompasses different developmental tasks which take into account the increased frailty of the late 80s and onwards. Given the lack of representation of those aged over their mid-80s, further research should investigate if this model also fits the 'oldest old' age group.

2.7 Conclusion

The results of this study supported a trans-theoretical, trans-diagnostic, non-linear process of psychological change. There were parallels with the findings from the adult psychological change process literature, such as the importance of building therapeutic relationships and learning new strategies, additional older people specific constructs were also found.

Older people highlighted that their change process occurred within the context of ageing. In addition, alongside learning new strategies and putting these into practice, older people identified that therapy facilitated the drawing on life lessons learned through previous experiences (pre-therapy). The non-linear shape of the process of change model supported developmental perceptions of ageing, wherein older people demonstrated increased reflection and introspection (e.g. Erikson's (1959/1980) 8th life stage).

In keeping with Sadavoy (2009) proposed that when undertaking therapy with older people clinicians should keep the "5 C's" in mind (Complexity, Chronicity, Comorbidity, Continuity and Context). He argued that older people's psychological distress can be more complex, last longer, have a high number of co-morbidities and

are heavily influenced by the context in which they occur. Psychological distress that originated as a result of early life experiences can be maintained by the way we perceive ourselves and others (referred to as Internal Working Models in attachment theory and schemas in assimilation theory). The attachment style developed in infancy can be replicated in future relationships. This continues to have an impact into older adulthood as demonstrated in the concepts of Seeking Help, Building of Therapeutic Relationships and Drawing on Life Lessons Learned as highlighted in the model proposed by this study. Thus attachment styles can be the cause of psychological distress, but can also serve to maintain it.

Attachment is trans-theoretical and trans-diagnostic and a relevant construct across the life span. Several researchers, using different research methodologies, have demonstrated that the concepts of attachment are applicable in adulthood. However, what is less clear is the understanding of attachment in older adulthood to inform therapy.

2.8 References

- Ashford, J., & LeCroy, C. (2009). *Human behavior in the social environment: A multidimensional perspective* Cengage Learning.
- Binder, P., Holgersen, H., & Nielsen, G. H. s. (2009). Why did I change when I went to therapy? A qualitative analysis of former patients' conceptions of successful psychotherapy. *Counselling and Psychotherapy Research*, 9(4), 250-256.
- Carey, T. A., Carey, M., Stalker, K., Mullan, R. J., Murray, L. K., & Spratt, M. B. (2007). Psychological change from the inside looking out: A qualitative investigation. *Counselling and Psychotherapy Research*, 7(3), 178-187.
- Charmaz, K. (2006). *Constructing Grounded Theory: A practical guide through qualitative analysis*. Sage. London
- Charmaz, K. (2014). *Constructing Grounded Theory* Sage. London
- Clarke, H., Rees, A., & Hardy, G. E. (2004). The big idea: Clients' perspectives of change processes in cognitive therapy. *Psychology and Psychotherapy: Theory, Research and Practice*, 77(1), 67-89.
- Elliott, R. (2010). Psychotherapy change process research: Realizing the promise. *Psychotherapy Research*, 20(2), 123-135.
- Erikson, E. H. (1959). Identity and the life cycle: Selected papers. *Psychological Issues*,
- Erikson, E. H. (1980). *Identity and the life cycle*. WW Norton & Company. New York

Erikson, E. H., & Erikson, J. M. (1998). *The life cycle completed (extended version)*.
WW Norton & Company. New York

Evans, C. (2007). Cognitive–behavioural therapy with older people. *Advances in Psychiatric Treatment*, 13(2), 111-118.

Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory*. Weidenfeld and Nicholson, London

Hayes, A. M., Laurenceau, J., Feldman, G., Strauss, J. L., & Cardaciotto, L. (2007). Change is not always linear: The study of nonlinear and discontinuous patterns of change in psychotherapy. *Clinical Psychology Review*, 27(6), 715-723.

Higginson, S., & Mansell, W. (2008). What is the mechanism of psychological change? A qualitative analysis of six individuals who experienced personal change and recovery. *Psychology and Psychotherapy: Theory, Research and Practice*, 81(3), 309-328.

Knight, B. (2009) Psychotherapy and older adults resource guide. Retrieved from <http://www.apa.org/pi/aging/resources/guides/psychotherapy.aspx> [accessed on 11.01.2014]

Laidlaw, K., & McAlpine, S. (2008). Cognitive Behaviour Therapy: How is it different with older people? *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 26(4), 250-262.

Laidlaw, K., Thompson, L. W., Gallagher-Thompson, D., & Dick-Siskin, L. (2003). *Cognitive behaviour therapy with older people* John Wiley & Sons. England

- Legislation.gov.uk. (2010). *The Equality Act 2010*. [online] Retrieved from <http://www.legislation.gov.uk/ukpga/2010/15/contents> [accessed on 11/2/2015]
- Llewelyn, S. (1988). Psychological therapy as viewed by clients and therapists. *British Journal of Clinical Psychology*, 27(3), 223-237.
- Llewelyn, S. P., Elliott, R., Shapiro, D. A., Hardy, G., & Firth-Cozens, J. (1988). Client perceptions of significant events in prescriptive and exploratory periods of individual therapy. *British Journal of Clinical Psychology*, 27(2), 105-114.
- Mackenzie, C., Gekoski, W., & Knox, V. (2006). Age, gender, and the underutilization of mental health services: The influence of help-seeking attitudes. *Aging and Mental Health*, 10(6), 574-582.
- Martinson, B. C., Crain, A. L., Sherwood, N. E., Hayes, M. G., Pronk, N. P., & O'Connor, P. J. (2010). Population reach and recruitment bias in a maintenance RCT in physically active older adults. *Journal of Physical Activity & Health*, 7(1), 127-135.
- Newman, B., & Newman, P. (2014). *Development through life: A psychosocial approach*. Cengage Learning. USA
- Older People's Psychological Therapies Working Group. (2011). *The challenge of delivering psychological therapies for older people in Scotland*. Retrieved from <http://www.gov.scot/Resource/0039/00392671.pdf> [accessed on 11.11.2014]
- Orford, J., Hodgson, R., Copello, A., John, B., Smith, M., Black, R. & Kerr, C. (2006). The clients' perspective on change during treatment for an alcohol problem:

Qualitative analysis of follow-up interviews in the UK alcohol treatment trial.

Addiction, 101(1), 60-68.

Ormel J., Kempen G. I. J. M., Penninx B. W. J. H, Brilman E. I., Beekman A. T. F. & Van Sonderen E. (1997). Chronic medical conditions and mental health in older people: disability and psychosocial resources mediate specific mental health effects., 27, 1065-1077.

Rayner, K., Thompson, A. R., & Walsh, S. (2011). Clients' experience of the process of change in cognitive analytic therapy. *Psychology and Psychotherapy: Theory, Research and Practice*, 84(3), 299-313.

Satre, D. D., Knight, B. G., & David, S. (2006). Cognitive-behavioral interventions with older adults: Integrating clinical and gerontological research. *Professional Psychology: Research and Practice*, 37(5), 489.

Scottish Government. (2014). Scotland performs: NHSScotland (HEAT targets).

Retrieved from

<http://www.scotland.gov.uk/About/Performance/scotPerforms/partnerstories/NHSScotlandperformance> [accessed on 11.11.2014]

Starks, H., & Trinidad, S. B. (2007). Choose your method: A comparison of phenomenology, discourse analysis, and grounded theory. *Qualitative Health Research*, 17(10), 1372-1380.

Stiles, W. B., Elliott, R., Llewelyn, S. P., Firth-Cozens, J. A., Margison, F. R., Shapiro, D. A., & Hardy, G. (1990). Assimilation of problematic experiences by

clients in psychotherapy. *Psychotherapy: Theory, Research, Practice, Training*, 27(3), 411.

The Matrix - a guide to delivering evidence based psychological therapies in Scotland. (2011). Retrieved from http://www.nes.scot.nhs.uk/media/425354/psychology_matrix_2011s.pdf
[accessed on 11.11.2014]

Walters, K., Iliffe, S., & Orrell, M. (2001). An exploration of help-seeking behaviour in older people with unmet needs. *Family Practice*, 18(3), 277-282.

Chapter 3. Attachment in Older People: A Systematic Review

3.1 Abstract

Objective: This current paper sought to systematically review the quality of studies examining attachment constructs within an older people population (defined as over 60 years old), and considered how attachment is assessed within this population.

Methodology: 22 papers were identified as relevant to this review; however 7 of these drew their conclusions from the same data set and were therefore grouped together. The quality of the remaining 16 articles was assessed using a qualitative framework, developed for this review.

Results: The methodological quality of these studies was found to be variable.

Despite these limitations, attachment was found to be a relevant construct within an older people population and could be grouped into the following key concepts; the stability of attachment across the lifespan, the universality/biologically programmed nature of attachment and the dimensions of attachment in relation to psychological adjustment and affect.

Discussion: The above concepts are discussed in relation to the theoretical aspects of attachment theory. Suggestions for directions for future research are also discussed in this review.

Keywords: Attachment, Measurement of Attachment, Older People

Highlights:

- Attachment classifications are relevant to older people, aged 60 years and over.
- There is an emerging evidence base of the different ways attachment styles can impact upon several issues that are particularly salient for this age group but there is insufficient data to draw conclusions at this stage.
- Limited evidence of studies exploring if the same measures of attachment standardised for younger adults are valid and reliable to use with older people.
- It is unclear whether the distribution of attachment styles differ in an older people population compared to younger adults, studies investigating this had significant methodological limitations and therefore these findings should be interpreted with caution.

This systematic review is written following the author guidelines of the journal Clinical Psychology Review. As per the guidelines, smaller tables are included as part of the text but the lengthy tables are situated in the appendices. The word count of the systematic review (except abstract, references and appendices) 8,901.

3.2 Introduction

A brief history of attachment theory development

Bowlby (1958) changed the way people examined the bond between infant and mother in the context of disruption through separation, deprivation and / or bereavement. Attachment figures provide a 'safe base' from which children can explore the world (Ainsworth, 1985). Attachment was defined by Cookman (2003) as referring to feelings of safety which are developed by proximity to an attachment figure in response to cues of danger, challenge or conflict. This proximity to the attachment figure gives individuals confidence, when they need feelings of safety and security, allowing individuals to interact with the environment. Attachment theory is believed to be relevant for individuals throughout their lifespan, as we have a continued need to develop and maintain enduring bonds with others (Ainsworth, 1985).

Attachment theory across the lifespan

Bowlby's concept of internal working models (IWM) is developed from the relationship 'prototype' established between an infant and their caregiver (Bradley & Cafferty, 2001). An individual's IWM influences the way in which they perceive and evaluate interpersonal relationships and, although the interactions with the original attachment figure may have changed in form and function, the IWM provides a framework which has 'profound' impact upon adult relationships (Bradley & Cafferty, 2001).

Since attachment styles will influence help seeking behaviour, it is important for the therapist to develop a good understanding of their client's IWM to guide therapeutic interventions (Daniel, 2006). By uncovering the links between past experiences and current ways of thinking and behaving, current behaviour becomes more understandable.

The different traditions of measuring attachment

To 'tap into' an individual's attachment style two distinct methodological traditions have emerged, interview or self-report based (Van Assiche et al, 2013). The Adult Attachment Interview (AAI, George et al, 1984, 1985 & 2006) is an interview based measure. The AAI records participants reflecting on their early experiences with caregivers, with professionals coding their responses. The coding system is based upon the way someone speaks about their childhood (narrative coherence), rather than the content per se, and classifies someone as showing either 'secure-autonomous', 'insecure-avoidant', 'insecure-dismissing' or 'disorganized' attachment (Ravitz et al, 2010). The measure's categories are similar to those of attachment behaviour classifications, observed in Ainsworth et al (1978) studies using the 'strange situation' paradigm. The AAI investigates early experiences with a focus on the relationship with parents.

In the other 'methodological camp' are measures developed using self-reporting. These measures tend to be focussed on relationships with romantic partners (Ravitz et al 2010). Hazan and Shaver (1987) constructed a self-report measure of adult attachment styles within the context of romantic relationships. This measure assumes individual differences in engagement in romantic relationships will mirror Ainsworth's classifications, again as found within 'strange situation' studies, to be 'secure', 'avoidant' or 'anxious resistant'.

However individuals classified as ‘dismissing’ on the AAI, and those categorised as ‘avoidant’ on the Hazan and Shaver measure, seemed to differ in important respects (Bartholomew and Horowitz, 1991). This demonstrated a distinction between ‘dismissing avoidance’ and ‘fearful avoidance’. The Bartholomew and Horowitz measure built upon Hazan and Shaver’s model and added Preoccupied as a fourth prototype (see table 1).

Attachment prototype	Secure	Avoidant – fearful	Avoidant – dismissing	Preoccupied
IWM of Self	Positive	Negative	Positive	Negative
IWM of Others	Positive	Negative	Negative	Positive

Table 1: Representation of Bartholomew & Horowitz (1991) 4 ‘prototypes’.

Since self-report measures investigate conscious attitudes towards current relationships, and memories of relationships, they are not able to detect when defences are distorting the individual's responses. One implication may be that individuals who may be classified as ‘dismissing’ using a narrative approach may also score as ‘secure’ on a self-report measure. In addition self-report measures are passive, and as such may not detect the attachment ‘phenomena’ that requires activation to be manifested. (Ravitz et al, 2010)

Categories of attachment styles assign individuals to one or other defined category (e.g. secure, insecure etc.) whereas dimensional approaches measure the ‘degree’ by which attachment styles are present. The AAI, Hazan and Shaver’s measure, and the Bartholomew and Horowitz measures, are all categorically based, i.e. an individual is classified as having either one or another attachment style. Griffin and Bartholomew (1994) developed a questionnaire, based upon the Bartholomew and

Horowitz measure, which could be scored both categorically as well as dimensionally.

Roisman et al (2007) conducted a meta-analysis of the association between the interview based AAI 'security versus insecurity' and the same self-report measure developed by Griffin and Bartholomew, which suggested a 'trivial to small empirical overlap'. This suggests that these two attachment measures, coming from different measurement traditions, are measuring different constructs, and therefore warn against citing and discussing the measures as if they were interchangeable, (Roisman et al, 2007). As yet there is no consensus as to whether attachment is inherently categorical or dimensional. Despite the measures being well validated and reliable within an under 60 year old adult population, it is still unclear if the measures all assess the same constructs, or have validity for older people

The stability of attachment across the life span

Several authors have suggested that attachment patterns are stable across infancy to young adulthood (e.g. Waters et al, 2000 and Van Ijzendoorn, 1995) and within young adulthood (e.g. Schrafe & Bartholomew, 1994). The prototype perspective (see Fraley et al, 2011) posits rules of information processing and behaviours are constructed in early life, and are developed in adaptation to the individual's early experiences, such as parental responsiveness. This perspective assumes that although working models may change over time, there is an underlying stable factor, a prototype. However attachment patterns have not been demonstrated to be universally stable and immune to life events. Fraley et al (2011) highlights these findings have led to an alternative perspective that he coined the contextual, or revisionist perspective.

Taking a contextual, or revisionist perspective, people's working models (representations) are adapted and modified throughout their life, to take account of variation in their environments. Thus it refutes the concept of an inherently stable latent prototype, (Fraley et al, 2011). Although Waters et al (2000) attachment styles were stable in the majority of participants, significant negative life events such as loss, life threatening illness and abuse could disrupt this stability. However the view that attachment styles can be revised in light of experiences has not been universally supported. For example Cozzarelli et al (2003) found that similar life events (such as the death of a close relative) were not strongly related to an alteration of attachment style. One possible explanation for these inconsistent findings is that it is not the objective elements of life events that changes attachment styles, rather it is the meaning people assign to these events (Davila & Sargent, 2003).

A common methodological issue of the majority of research investigating the stability of attachment styles is the use of relatively short time frames. Fraley et al (2011) studied change across 30 days to a year, Scharfe and Bartholomew (1994) for 8 months and Davila and Sargent (2003) 8 weeks. These are relatively short timeframes to demonstrate whether attachment styles change throughout the life span. Attachment theory has been proposed (by Bowlby, 1958; Ainsworth, 1991), as relevant from infancy to old age (from the 'cradle to the grave'), however research exploring attachment amongst older people is relatively scarce, in comparison to the evidence base for attachment during childhood or young – middle adulthood (Bradley & Cafferty, 2001).

Is attachment theory applicable to older adults?

Antecedents that invoke attachment behaviour, beyond adulthood into older age, can include a variety of different fear-provoking or challenging situations and conflict of interactions (Cookman, 2005). Illness, common for older people, can also provoke attachment behaviour, and may even alter their attachment style (see the revisionist perspective above). As older people are often faced with age-related transitions in relation to their health, knowledge about attachment can enable care staff to mediate these potentially negative effects. (Cookman, 2005)

Two previous reviews investigated attachment and older adulthood (Bradley & Cafferty, 2001 and Van Assiche et al, 2013). Bradley and Cafferty (2001) found attachment particularly salient for older people due to the increased risk of separation, loss and vulnerability facing this population. They found although the number of studies exploring attachment within older age was small, it was rapidly growing. The literature centred around three main focus areas: attachment bonds in caregiving and chronic illness; the influence of attachment styles upon coping with bereavement and loss; and the relationship of attachment styles to adjustment and wellbeing.

Measuring attachment in older adults

Several methodological limitations were apparent across the evidence base of previous reviews of attachment and older people. Validity and reliability of measures used to assess attachment could be called into question. In particular, authors frequently did not measure attachment 'categories' per se, but measured 'dimensions' of attachment constructs (e.g. Barnas et al, 1991). Therefore it was

unclear if studies were assessing attachment, or other confounding constructs, such as caregiving or satisfaction of relationships.

Although the Bradley and Cafferty (2001) review gave a good overview of available research, it lacked evidence of the literature being gathered in a systematic way, and inclusion or exclusion criteria were not reported. Due to these methodological / reporting limitations it is unclear how the studies were selected, or were representative of the research base as a whole.

It was another ten years before these limitations were addressed by a systematic review of attachment styles, (Van Assiche et al, 2013). This qualitative, systematic review of literature concerning attachment styles and older adults included every study published between 1983 and June 2012. There were four main findings: age-related changes in the number and types of attachment figures (older people had fewer attachment figures in total and appeared to have a higher prevalence of symbolic attachment figures such as a deity); the quality of attachment appeared to change with age (for example there was evidence of lower prevalence of attachment anxiety but not attachment avoidance); attachment was theoretically associated with indices of both intra and inter individual functioning; evidence that insecure attachment styles had a negative impact upon caregiver burden and the behaviour of people with dementia. However again, Van Assiche et al (2013) draw attention to some methodological limitations meaning findings should be treated with caution.

Large differences were found in the prevalence of attachment anxiety and/or avoidance depending upon whether measures assessed attachment styles in general, or relationship specific attachments. In addition, few studies included a control group. Also to study age-related changes in attachment patterns, there was

urgent need for case control and longitudinal study designs. This evidence tentatively suggests the presence of age-related changes in attachment dimensions, but not upon classifications. They found a large variation of both sample size and inclusion criteria, and large differences in how authors classified 'old age'. These issues need to be resolved in order to make definite comment on age-related changes of attachment. Although Van Assiche et al (2013) did report studies investigating older people's attachment to place or animals, they highlight these attachments were outwith the original construct of attachment to humans.

Despite Van Assiche et al (2013)'s review addressing some of the limitations of the Bradley and Cafferty (2001) paper, by reporting their procedure thoroughly and the inclusion and exclusion criteria used, neither assessed the reviewed research in terms of minimisation of bias. Given that most attachment literature is 'observational' by nature, minimisation of bias could be argued to be the keystone of assessing quality in these methodologies.

Both Van Assiche et al (2013) and Bradley and Cafferty (2001) highlight one significant methodological limitation: examining the phenomenon of attachment within an older population was dependent on particular measures selected to assess attachment. They noted several studies used validated and reliable measures, well known within the attachment and adulthood research (adults aged below 60 years). However few examine/report if these measures have been validated or assessed as reliable with an older people population. Thus this systematic review paid particular attention to quality, validity of measures used, and minimisation of bias, in assessment of attachment patterns within an older people population.

3.3 Aims of the current review

This current paper sought to systematically review the quality of studies, considered how human to human attachment is assessed within older people (defined as over 60 years old), and provides an up-to-date rigorous critique of attachment within older people, addressing the limitations of previous reviews by including assessing minimisation of bias.

3.4 Method

Inclusion and exclusion criteria

To be included studies were required to be empirical studies encompassing older people (aged 60 and over with no upper age limit) who were cognitively intact, and where a measure of attachment style was undertaken. The studies were only included if they were published in a peer reviewed journal, therefore research from dissertations, poster presentations, conference presentations and book chapters were excluded. In addition, case studies and single N research were also excluded. Reviews of attachment in older age were also excluded from the systematic review. Research encompassing only those with dementia, were excluded as this study investigates attachment in cognitively intact older people only. Studies that examined attachment to spiritual symbolism, attachment to place and / or attachment to pets were also excluded. It was considered that these excluded papers were inconsistent to the research questions of this review, which only examined human relationships. As access to translation services was not available, only studies published in the English language were included. The author acknowledged this may have introduced some bias and limited the scope of the search.

Search strategy

The following databases were searched in February 2015: EMBASE, MEDLINE, ASSIA, PsychInfo (EBSCO) and CINAHL. These databases were searched to include studies from the earliest available date to February 2015. The search terms used combined the following: 'attachment', 'attachment style(s)', 'attachment pattern(s)', 'attachment behaviour' with 'old age', 'elderly', 'geriatric', 'lifespan', 'late(r) life'.

The literature search from the aforementioned databases generated 6033 results (669 from EMBASE, 4650 from MEDLINE, 281 from ASSIA, 240 from Psychinfo (EBSCO) and 193 from CINAHL). These results were screened for relevance by title and 555 results were retained. The abstracts of these studies were retrieved and screened and the methods of 288 studies were reviewed. See systematic review Flowchart1 below. A further 24 were identified as duplicates and removed. 22 studies were reviewed in full, however 7 used the same dataset and were grouped together as one for this review (see Appendix 2).

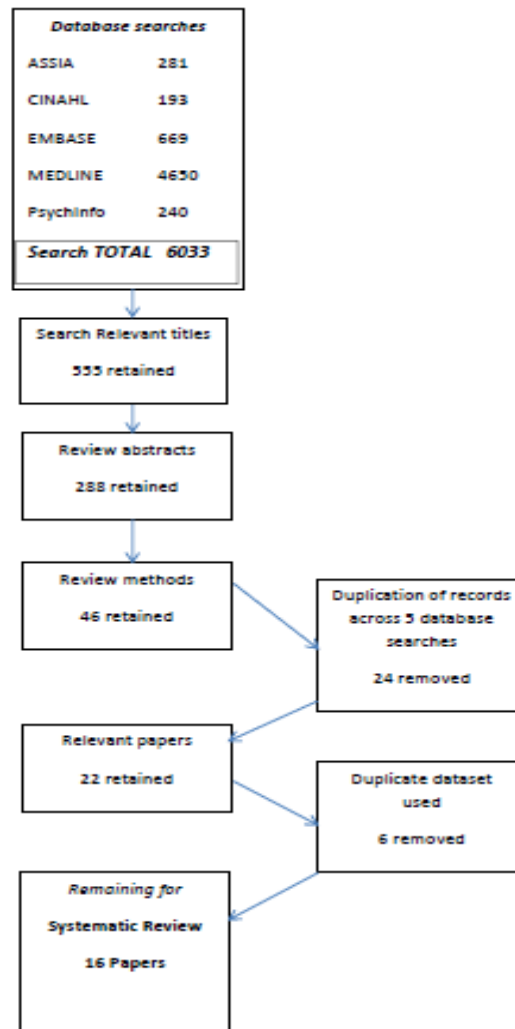


Figure 1: Systematic Review Flowchart depicting systematic review process

Developing a Quality Criteria Rating Checklist for a systematic review of observational studies

There are many checklists for rating the quality of published research, however these are predominantly designed to review studies which utilise randomised control trials (e.g. SIGN Methodology Checklist 2: Controlled Trials, 2012) or evaluations of reviews (such as SIGN Methodology Checklist 1: Systematic Reviews and Meta-analyses, 2014). However the studies identified which addressed the aims of the

current review utilised an Observational Methodology. Therefore a quality criteria rating checklist was developed from Sanderson, Tatt and Higgins' (2007) systematic review of 'Tools Used For Assessing Quality And Susceptibility To Bias In Observational Studies In Epidemiology: A systematic Review And Annotated Bibliography', the Critical Appraisal Skills Programme – cohort study checklist (CASP, 2010) the SIGN methodology checklist of cohort studies (2012) and the Strengthening the Reporting of Observational studies in Epidemiology statement (STROBE, 2007). Sanderson, Tatt and Higgins (2007) concluded, although there are several useful assessment tools, as yet there is no definitive tool which stands out above the rest. They report that due to the nature of observational studies this methodology is particularly susceptible to bias and therefore assessing how researchers control for this variable is an important consideration to bear in mind when reviewing observational studies.

A qualitative judgement is acknowledged to be subjective, and as such there is a risk of bias, therefore all appraised studies were prorated independently by the author 1 and author 2 or 3. Any disagreements were resolved through discussion to minimise the risk of rater bias. Consensus inter-rater bias (KAPPA) could not be calculated as no overall rating score was included in the checklist.

Although it is acknowledged that the following quality criteria rating checklist is not standardised, nor validated (as that is outwith the scope of this review), it has been developed using the summary and amalgamation of several well respected and validated tools. The following checklist was designed to act as a guide as to the methodological strengths of the studies' efforts to control for bias, rather than to address all the comparative merits and weaknesses. It is considered that controlling for bias is an important indicator of the relative quality of observational studies'

methodologies (Sanderson, Tatt & Higgins, 2007). The utilised quality criteria rating checklist was as follows:

Quality Criteria Rating Checklist

1. Does the study address a specific research question?
<i>a. did the methodology used in the study answer their research question?</i>
2. Are the selection methods clearly defined & appropriate?
<i>a. are participants representative of a defined population?</i>
<i>b. were they recruited in an acceptable way?</i>
<i>c. are inclusion & exclusion criteria clearly defined?</i>
<i>d. are criteria justified?</i>
3. Is the measurement of study variables clearly defined & appropriate?
<i>a. are the measures validated?</i>
<i>b. are the measures reliable?</i>
<i>c. are the measures validated for older people?</i>
4. Are any design specific sources of bias reported? –
<i>a. are any design specific sources of bias appropriately minimised?</i>
<i>b. were the measurement methods similar in all groups?</i>
<i>c. is there evidence of minimisation of bias?</i>
5. Is the control of confounding variables reported & appropriate? –
<i>a. have the authors identified all important confounding factors?</i>
<i>b. have they taken account of the confounding factors in the design?</i>
<i>c. have they taken account of the confounding factors in the analysis?</i>
6. Is the use of statistics clearly defined & appropriate?–
<i>a. appropriate method of analysis used?</i>
<i>b. effect sizes & power calculations completed?</i>
<i>c. effect sizes & power calculations met?</i>
<i>d. do they explain how missing data was addressed?</i>
7. Are any conflicts of interest declared?
8. Has the research specified if it had gained ethical approval?

3.5 Results

Characteristics of the studies

All the studies were observational in nature and cross-sectional in design. Sample sizes varied across the studies from 48 to 86,555. The age ranges varied from 60 to

no upper age limit. Three studies included in this review included participants aged from 17 to 96 as these examined age differences in attachment styles. See Study Characteristics table for more information (Appendix 9).

Population Characteristics

In total 91,925 participants were assessed across all the studies, however it should be noted that this figure includes the younger aged adults from the age comparison studies. The age range of older people spanned from 60 – 102 years old (it is not clear what the N is for this group as it was not reported in some studies). No studies differentiated between the oldest old and the youngest old. It is not possible to accurately report the gender split of the overall population as several studies did not include this information. Participants were recruited from a variety of sources including internet respondents, randomly selected samples from suburban communities, former prisoner of war associations, senior centres, randomly selected population registries, caseloads of individual clinicians, nursing homes, churches and retirement facilities, from newspapers and notices and the older relatives of the younger adult participants. It is not possible to report the specific demographics of the various populations, such as socio-economic status, as this was not always reported.

Measurement of Attachment

The results of the review showed that a variety of tools were used to measure attachment. One paper used a constructed, structured interview, developed for that particular study (Barnas, Pellina & Cummings, 1991), however the majority utilised a standardised measure. Nine measures were self-report measures, two were interview based and one was a self-report measure but applied in an interview format. Eight measures were dimensional in nature, three were categorical and one

was both. Five measures examined attachment styles in relationships in general, one measure addressed romantic relationships, two examined relationship to adult offspring and in two the relationship examined was unclear.

The Adult Attachment Prototype Rating (Kirchmann et al, 2007) was used by Kirchmann et al (2013), and the Adult Attachment Styles Questionnaire (Hazan & Shaver, 1987) used by Waugh et al (2007). Experiences in Close Relationships (Brennan, Clark & Shaver, 1998) was used by (Dieperink et al (2001) and the revised version (Fraley, Waller & Brennan, 2000) used by Chopik et al (2013). The Lipson-Parra Adult Attachment Scale (Lipson-Parra, 1990) was applied by Lipson-Parra (1990), and the Measurement of Attachment Qualities (Carver, 1997) was utilised by Segal, Needham and Coolidge (2009). The Relationship Questionnaire (Bartholomew & Horowitz, 1991) was used by five studies (Ruby & Tasker, 2008; Webster, 1997; Diehl et al, 1998; Dieperink et al, 2001 & Jain & Labouvue-Vief, 2010), the Relationship Scale Questionnaire (Griffin & Bartholomew, 1994) was employed by three (Magai et al, 2001; Verdecias et al, 2009 & Segal, Needham & Coolidge, 2009), and the Relationship Specific Attachment Scales for Adults (Asendorpf et al, 1997) was utilised by Klug et al (2014). Perren et al (2007) used a measure based upon Hazan & Shaver's (1987, 1990) single item measure of attachment style. See Measures of Attachment table for more information (Appendix 11).

The Experiences in Close Relationships – Revised (ECR-R) Inventory (Fraley, Waller & Brennan, 2000) was used by Chopik et al (2013). The ECR-R Inventory measures individual differences in attachment avoidance and anxiety, and involves individuals rating statements by the extent they agree with each item on a Likert

scale from 1 strongly disagree to 7 strongly agree. Although good convergent and divergent validity has been demonstrated for this measure (see Sibley, Fischer & Liu, 2005) the same psychometric properties have not been investigated in older people.

The Relationship Questionnaire (Hazan & Shaver, 1987) has been through a variety of different revisions. Waugh et al (2007) refer to this questionnaire as the Adult Attachment Styles Questionnaire. The measure itself involves participants identifying the paragraph that best describes their feelings about themselves in relationships. There are three paragraphs that represent the attachment patterns as proposed by Ainsworth et al (1978). The secure style describes being comfortable with intimacy and dependency, with a low anxiety of loss. The ambivalent paragraphs describe a desire of closeness but with concern about rejection, and desiring more intimacy than most people. The final paragraph depicts the avoidant style which includes discomfort with intimacy and dependency, and a lack of trust in relationships. Similar to the ECR-R Inventory (Fraley, Waller & Brennan, 2000) convergent and divergent validity has been demonstrated (see Sibley, Fischer & Liu, 2005) but this has not been replicated for older people.

In 1991 Bartholomew and Horowitz modified the Relationship Questionnaire. They proposed that individuals' attachment is dichotomised as being either positive or negative. They highlighted that as adult attachment can be conceptualised as image of self and image of others, there are 4 different possible attachment styles; secure (positive self-positive others), dismissing (positive self-negative others), preoccupied (negative self-positive others) and fearful attachment (negative self-negative others). The modification suggested by Bartholomew and Horowitz (1991) involves two parts. In the first part, participants read paragraphs describing the 4 different adult attachment styles (secure, dismissing, preoccupied and fearful attachment) and

select the one they feels best describes their behaviour in close relationships. In the second part, participants re-read the same paragraphs and indicate how similar they describe their behaviour in close relationships on a 5 point Likert scale (1 very unlike me, 5 very like me). The Bartholomew and Horowitz (1991) Relationship Questionnaire was developed for use within a young adult population, however was utilised in several studies included in this review (Diehl et al, 1998, Dieperink et al, 2001, Jain & Labouvue-Vief, 2010 (although these authors call the questionnaire the Attachment Prototypes Questionnaire), Rusby & Tasker, 2008 and Webster, 1997). Validity for an older aged adult population was not sufficiently demonstrated.

Another modification of the Relationship Questionnaire was developed by Griffin and Bartholomew (1994). The Relationship Style Questionnaire (Griffin & Bartholomew, 1994) is comprised of 30 statements collated from the attachment scales developed by Bartholomew and Horowitz, 1992, Collins and Read, 1990 and Hazan and Shaver, 1987. This questionnaire has 4 scales; secure, preoccupied, fearful and dismissive which each have four/five items rated on a 5 point Likert scale from 1 not at all like me to 5, very much like me. As it is a dimensional measure there is a score on each scale. The attachment quality of each scale is the same as used in Bartholomew and Horowitz (1991) Relationship Questionnaire. The Relationship Style Questionnaire (RSQ) was adopted by Magai et al (2001), Verecias et al (2009) and Segal, Needham & Coolidge (2009). This latter study also utilised the Measurement of Attachment Qualities (MAQ, Carver, 1997). The MAQ is also a self-report measure. The scales in this questionnaire are secure, avoidant and two ambivalent attachment patterns (ambivalent-worry and ambivalent-merger). Each scale contains 3-5 items that participants rate on a 4 point Likert scale from 1, I disagree a lot to 4, I agree a lot. This measure is also dimensional. Segal, Needham

& Coolidge (2009) demonstrated modest evidence for convergent validity between the MAQ and the RSQ for older people.

Lipson-Parra (1990) developed the Lipson-Parra Adult Attachment Scale which consisted of 59 items, 55 of which were attachment items. These were based on Bowlby's framework of specificity, duration, engagement of emotion, organization, biological function (safety/security) and caregiving. This was also a dimensional measure, with participants selecting a response to each statement of completely true to not true at all. Construct validity, specifically for older people, of this assessment scale was established via factor analysis (Lipson – Parra, 1990).

The Adult Attachment Prototype Rating (Kirchmann et al, 2007; Pilkonis, 1988 & Strauss et al, 1999) was utilised by Kirchmann et al (2013). This interview based procedure measures degrees of attachment security as a continuous variable and attachment categories as discrete variables i.e secure, ambivalent or avoidant.

Kirchmann et al (2013) indicate that it has been demonstrated to have high reliability and validity estimates, however it appears that the same psychometric properties have been presented for older people. Klug et al (2014) also used an interview format using the Relationship-Specific Attachment Scales for Adults (Asendorpf et al. 1997), which was based upon a self-report questionnaire, in order to increase validity for use with older adults (as suggested by Asendorf in a personal communication to Klug et al, 2014).

There were several research articles that appeared to utilise the same sample, and use the same methods as those reported in Magai et al (2001). This review has grouped these studies together and the key findings are presented in the study characteristics table in appendix 9. As these all used the same methodology,

conducted with the same sample, and used the same measure of attachment, reported in similar ways, only Magai et al (2001), as the first study in this series, was compared to the quality checklist to reduce duplication.

Does Attachment Change across the Lifespan?

Four studies examined age differences in attachment styles. Chopik et al (2013) and Jain and Labouvie-Vief (2010) compared an older people sample with a younger adult sample and found differences in attachment styles correlated to age. Chopik et al (2013) suggested older people presented as having lower attachment anxiety, however they excluded those aged over 70. This limits the applicability of this study as it is not representative of an older population. In addition, this study investigated only attachment anxiety and avoidance. Jain and Labouvie-Vief (2010) suggested that for older people attachment styles are linked to emotion category predicting response times. Segal, Needham & Coolidge (2009) and Diehl et al (1998) also investigated age differences in attachment style. Segal, Needham & Coolidge (2009) found effects of age on the ambivalent-worry scale of one measure (MAQ) and the preoccupied attachment scale of the RSQ (which they argue measure the same construct). However they did not find any age differences in the secure, avoidant or dismissing attachment classifications. It should be noted that some of their older age group participants were relatives of the younger age group sample which may have introduced bias. Diehl et al (1998) found differences in family climate and personality variables on attachment classifications but no interactions by age. However it should be noted that although they attempted to recruit a representative sample, they do acknowledge that their sample overly represented high functioning and well educated individuals which may have had a confounding impact upon their results. Given these methodological issues, these results declaring either the presence or

the absence of age related differences in attachment styles should be interpreted with caution.

Webster (1997) noted that the distribution of attachment styles in his study appeared to differ from previous research conducted with younger participants. He reported that 52.2% of his elderly participants were classified as dismissively attached, versus 18% of younger adults (as reported by Mikulincer & Orbach, 1995). Webster's (1997) results also suggested the opposite effect in relation to secure attachment (33.3% in Webster's 1997 study of older people and 47% in younger adults as reported by Mikulincer & Orbach, 1995). He concluded that within older people population dismissing attachment styles are more prevalent than secure, and the opposite distribution appears to be true in younger adults (he also noted the distribution of attachment styles within younger adults appears to be similar to the distribution seen in infants).

In summary, it is possible that there is a different distribution of attachment styles within an older people population compared to younger adults. However, there were no longitudinal studies to investigate whether these age differences are due to factors such as cohort effects, or due to the impact of major life events such as experiences during World War II.

Is Attachment a Universal/ Biologically Pre-programmed system?

If attachment is a universal/ biologically pre-programmed system one would expect the distribution of attachment styles to be roughly equal across both genders and ethnicities. Chopik et al (2013) found that women tended to have slightly higher anxiety (this difference was greatest amongst younger adults) and avoidance styles. There is also evidence of gender differences in relation to attachment and

depression/loneliness (Klug et al, 2014). For men, lower depression was associated with higher attachment severity with no reported feelings of loneliness. For women, lower depression was also associated with not feeling lonely, but the association with secure attachment was weaker than for the men. Gender differences in attachment styles have been suggested in the child and general adult literature however Bakermans-Kranenburg and Van IJzendoorn (2009) suggest there is only a “brittle” evidence base on which to support this claim. Clearly there is need for further investigation into potential gender differences in the distribution of attachment styles.

There is limited research examining attachment and ethnicity. Those which investigated attachment and ethnicity in older people used the same dataset and reported different aspects of ethnicity in various different papers, this means that there is a possibility that the results they found are limited to the unique population recruited and therefore not generalisable. Magai et al (2001) noted that although the majority of their sample had dismissing/avoidant attachment styles, those classified as European Americans score higher than African Americans on attachment security and African Americans scored higher than European Americans on dismissing attachment. Montague et al (2003) found that there were ethnic differences (between African American and European American adults) in adult attachment and childhood socialization practices. Merz and Consedine (2012) found that the association between secure attachment and wellbeing was stronger among African Americans and English speaking Caribbean, compared with European American and Eastern European immigrant groups. Furthermore, they noted that negative fearful/avoidant attachment style on wellbeing was buffered by being an English speaking Caribbean, but not for the other groups. As these findings have not been replicated and reliability is called into question, no firm implications from these results can be drawn.

There was also evidence that life experiences have an impact and possibly change attachment styles. Two studies included in this review compared attachment styles in older people who were evacuated during World War II and those who were not evacuated. Rusby and Tasker's (2008) evacuated sample were evacuated between the ages of 4-6 years. However, given Bowlby's (1958) assertion that attachment styles were said to be developed before the age of 4 years old, if attachment styles are assumed to be stable and trait-like, the experience of being evacuated between the ages of 4-6 should not impact upon attachment styles. However, Rusby and Tasker (2008) found differences in attachment styles in comparison to those who were not evacuated, with a fewer number of those who were evacuated being categorised as securely attached and an increased incidence of fearful attachment styles. Similarly, Waugh et al's (2007) results suggest that abuse during evacuation led to increased levels of trauma and insecure attachment styles. It could be argued that significant life events may alter attachment styles. These studies support evidence suggesting that attachment styles can be revised in light of adverse life experiences (such as Waters et al, 2000).

Dimensions of Outcome in relation to Psychological Adjustment and Affect

Two groups of researchers investigated attachment and affect. Jain & Labouvue-Vief (2010) assessed participants' attachment and associated performance on a Stroop task. They found that dismissing attachment styles were associated with longer response times for anger and fear words, and secure was associated with increased reaction times for joy. They noted that overall anxious attachment styles were associated with slower reaction times. The second group of researchers used the same dataset but commented on different aspects of emotional experience. Secure attachment was associated with less guilt, contempt & shame and more joy, sadness

interest, fear and anger. Dismissive attachment was associated with less joy, shame and fear (Consedine & Magai, 2003). Early emotion socialization had both direct and indirect (mediated by attachment style) effects on emotional experience. Further, the impact of punitive socialization on adult negative affect was greater in older people, compared to younger adults (Magai et al, 2004). Merz and Consedine (2009) also noted that higher attachment security was associated with stronger positive emotional support and this led to less negative effects on older people's wellbeing. However, due to insufficient replication of findings, limited implications can be drawn with regards to attachment and affect.

In relation to psychological adjustment, Kirchmann et al (2013) stated that secure attachment was associated with better adjustment to medical burden, in terms of higher life satisfaction scores. Attachment security was also independently related to life satisfaction. They also noted an association between medical burden and lower life satisfaction. This was stronger for those with insecure attachment styles than secure. Barnas, Pellina and Cummings (1991) found insecure attachments were associated with negative scores on measures of social, psychological and physical wellbeing. However they also found insecure attachment styles were associated with having more helpful strategies to cope with stress. They found no main effect of attachments to adult children. However Long and Martin (2000) reported those with an anxious personality received less affection and had lower perceptions of attachment to adult children, but had higher feelings of affection towards their adult children. They noted lower affection, for and from adult children, was associated with loneliness. Klug et al (2014) noted loneliness was associated with depression. Lipson-Parra (1990) found significant correlations between the attachment scores and frequency of contact with significant others including spouses and adult children.

Perren et al (2007) also discovered that spouse's attachment styles were significantly associated within the relationship. In terms of sleep, Verdecias et al (2009) found significant correlations between preoccupied attachment and reports of daytime napping, and use of sleep inducing medications. However no evidence was uncovered among the sleep measures and secure, dismissive or fearful attachment dimensions. Dieperink et al (2001) found that those with secure attachment styles scored significantly lower on Post Traumatic Stress Disorder (PTSD) measures, and attachment styles were more predictive of PTSD symptoms than levels of trauma severity.

Quality of Studies

Overall none of the studies covered every point on the review checklist. The selection methods were not always clearly defined and appropriate, for example neither Barnas, Pellina and Cummings (1991) nor Chopik et al (2013) recruited representative participants of a defined population. All studies used convenience sampling. In addition some methods of recruitment were not appropriate e.g. Segal, Needham & Coolidge (2009) who recruited undergraduate students, offering university credits for their participation, and the participation of their elderly relatives. Not all studies reported the validation or reliability of measures used, although most did clearly define their study variables, which were considered appropriate for use. Few studies, included in the review, reported any design specific sources of bias, however those highlighting this issue did present evidence of minimisation of bias (Diehl et al, 1998; Kirchmann et al, 2013; Klug et al 2014; Long & Martin, 2000; Magai et al, 2001 and Waugh et al, 2007). Similarly some papers did not identify or take account of confounding factors (Barnas, Pellina & Cummings, 1991; Kirchmann et al, 2013; Magai et al, 2001; Webster, 1997; Lipson-Parra, 1990; Rusby & Tasker,

2009 and Segal, Needham & Coolidge, 2009). Although the statistics were clearly defined and appropriate in all studies, very few reported effect sizes or power calculations, such as Chopik et al (2013), Rusby & Tasker (2008) and Verdecias et al (2009) and one, Segal, Needham & Coolidge (2009) reported only effect sizes. Only Chopik et al (2013) reported that they met the sufficient sample size for sufficient power. (see Quality Ratings table, Appendix 10).

The methodological issues, namely the lack of evidence of minimisation of bias in all the studies, imply findings should be interpreted with caution. Only Kirchmann et al (2013) and Long and Martin (2000) reported the measures taken to minimise sources of bias. Given all studies were observational in nature, minimisation of bias is highly important to ensure good quality research.

3.6 Discussion

Aims

This reviews sought to systematically review the quality of studies considering how human to human attachment is assessed within older people whilst addressing the limitations of previous reviews by including assessing minimisation of bias. It was not possible to synthesis the data as there were a variety of methods and measures used to assess attachment, therefore this study focussed on providing a qualitative examination of findings for each of the papers.

Summary of results

Combining the populations of all the included studies results in a large sample ($n = 91,925$, however, it should be noted this also includes the younger adults who were recruited to investigate age differences in 4 studies). The older people population's age span ranged from 60 to no upper age limit. However, it is difficult to comment on

whether this sample was representative. In some studies, there was limited demographic information although some did acknowledge that their sample was biased to higher educational attainment and high functioning (Diehl et al, 1998). Although the age range across all the studies was generally wide, some studies had an upper limit of 70 years old (such as Chopik et al, 2013) which excludes a large section of the older people population. In addition none of the studies differentiated between the youngest old and the oldest old. The oldest participant was 102 years old and may have had a very different upbringing to a 60 year old. After all we would not combine a newborn infant and an adult in their 40s in a research study and report it as being a homogenous sample. If we believe that attachment may change as we age (such as Webster, 1997) one must assume it may continue to change as we progress through older adulthood. It is unclear if the population included in these studies was a representative sample and therefore the results should be interpreted with caution.

Theoretical approaches to measurement of attachment

Overall, the spread of measures used to investigate attachment in older people reflect theoretical methodologies, reflecting whether attachment is best measured as a categorical or dimensional construct. The majority of the measures used by the studies included in this review adopted the dimensional position but not all. Given the distinct traditions the different methodologies arose from, it is unadvisable to use these measurements interchangeably, assuming they are measuring the same constructs. Some studies investigated specific relationships such as relationship to adult offspring e.g. Long and Martin (2000), Perren et al (2007) and Barnas, Pellina & Cummings (1991). Other studies specified romantic relationships such as Dieperink et al (2001). It should be noted that some measures were developed to

assess attachment in romantic relationships; however these same measures have been used to investigate relationships in general. None of the studies assessed whether this generalisation is appropriate, within the older people population. In two studies, it was unclear which relationships were investigated to assess attachment (Lipson-Parra, 1990 and Segal, Needham & Coolidge, 2009). The majority of studies did not specify which relationship participants should consider and appeared to be investigating behaviour in relationships in general. The most used measures were the Relationship Questionnaire (RQ, Bartholomew and Horowitz, 1991) and the Relationship Scale Questionnaire (RSQ, Griffin and Bartholomew 1994). It should be highlighted that both the RQ and the RSQ were developed based on previous measures and were initially developed for adults under 60 years old. There appears to be an assumption that these measures are valid and reliable for an older age group. However, there was a paucity of studies investigating whether this is an appropriate assumption to make.

Webster (1997) noted that the distribution of attachment styles in his sample of older people differed from previous studies exploring the distribution of attachment styles in younger adults (e.g. Mikulincer & Orbach, 1995). Several studies in this review conducted a comparison of attachment styles between younger and older adults (Chopik et al, 2013; Jain & Labouvie-Vief, 2010; Segal, Needham & Coolidge, 2009 & Diehl et al, 1998). However the results of these studies were not homogenous. For example Chopik et al (2013) reported that attachment anxiety is lower in older people compared to younger adults. Segal and Coolidge (2009) found an effect dependent upon age but only on the ambivalent- worry scale of the MAQ and the preoccupied attachment scale of the RSQ. Diehl et al (1998) found no interactions by age. It is possible that these inconsistent results are a result of poor validity of the

measures used and they did not take into account life events/ later attachments which may have influence a change in attachment styles. An alternative hypothesis is that attachment may have a “cohort effect”. The practice of parenting was very different several generations ago as compared to now. Unfortunately a cross-sectional study is unlikely to clarify if the differences some researches find in distribution of attachment styles by age is due to methodological differences, a cohort effect or if it is due to life experiences that can impact upon attachment.

Bowlby (1958) claimed that attachment is a universal/ biologically pre-programmed system. He claimed that there is a key period of attachment style development and it is formed before the age of 4. This suggests that the attachment style one develops in our very first interactions shape all our future relationships. In fact, this is the premise that some adult attachment measures are based on, such as Hazan and Shaver’s measure. This measure examines the relationship with a current romantic partner as this is assumed to be partly the same motivational system as occurs between care-giver and infant e.g. a secure base. However, two studies included in this review examined if a significant life event such as being evacuated and therefore being separated from one’s primary caregiver may alter one’s attachment style.

Again this is difficult to ascertain with studies that are cross-sectional and observational in design. However, Rusby and Tasker (2008) and Waugh et al’s (2000) findings that a fewer number of those who were evacuated were categorised as securely attached, follows previous research that has been conducted with other populations. For example, Waters et al (2000) who conducted a longitudinal study (20 years) exploring attachment security in infancy and early adulthood. Therefore, it is very possible that attachment styles are formed in infancy but they may be altered by significant life events.

Crittenden's Dynamic Maturation Model of Attachment (see Crittenden 2000 for a more in depth description) suggests that the different patterns of attachment are self-protective strategies which are developed through interactions with protective figures (or attachment figures such as parents). She states that the symptoms of these patterns of attachment have a functional basis and will change when individuals notice that the strategies do not match the context they are in, have access to different responses to offer and feel safe to implement the new strategies. This model acknowledges that life events can alter attachment patterns. In addition, it strongly supports the tenet that attachment styles/ patterns of attachment are more appropriately described in a dimensional context. This model also contributes towards our understanding as therapists of how attachment difficulties can be treated in a therapeutic context. It suggests that in order to treat attachment difficulties the goals of therapy should be to help individuals to notice that their strategies are incongruent with the context they are in, to teach different responses and strategies, whilst creating a safe environment in which the individual feels able to implement these.

Therapists should keep attachment styles in mind, regardless of the age of the population they are working with. As research has demonstrated that insecure attachments are associated with several negative outcomes it is important that a therapist is able to notice insecure attachment styles and to intervene if these cause difficulties for the individual. Consedine and Magia (2003) found that dismissive attachment styles were associated with less joy, shame and fear. In addition, Merz and Consedine (2009) noted that higher attachment security was associated with stronger positive emotional support and this was protective to their wellbeing. It has also been found that secure attachment is correlated with better adjustment to

medical burden and higher life satisfaction (Kirchmann et al, 2013). Conversely Barnas, Pellina and Cummings (1991) found insecure attachments were associated with negative scores on measures of social, psychological and physical wellbeing. Given older people are more likely to have more medical burden to adjust too and may already find their social, psychological and physical wellbeing threatened by the challenges which may be as a result of ageing (such as loved ones passing away, decreased mobility and as a result reduced social opportunities and the deterioration of physical health) as older people clinicians we should also keep attachment styles in mind.

It should be highlighted that there were several methodological issues with the studies in this review. There were some inappropriate recruitment methods (e.g. Segal, Needham & Coolidge, 2009) and there were issues regarding recruiting a representative sample. Not all studies reported the reliability or validity of the measures used. Most studies did not design an older people specific measure and appeared to assume that the measures used in adult would be valid for this older population, without first validating this. In addition, some changed the attachment figure (which refers to a romantic partner in the adult literature) to an adult child. Again there were no reports if this alteration alters the validity of the measure. In addition, very few studies reported any design specific sources of bias and/or the minimisation of these. All in all, this casts a cautionary warning before taking all these results at face value.

Comparison to other reviews

The conclusions drawn by this current review are similar to those found in previous reviews (namely Bradley & Cafferty, 2001 and Van Assche et al, 2013). Several of the studies included in this review were plagued by the same methodological 'flaws'

highlighted in previous reviews, despite there being a decade of research between Bradley and Cafferty's paper and the present study. Bradley and Cafferty (2001) stress that although they found evidence that attachment was an important construct to examine within the older people population, due to methodological flaws, their conclusions were tentative and preliminary. The second review conducted by Van Assche et al (2013) expressed no such hesitation when presenting their findings. It is possible that this surety was because the research had vastly improved in quality in the years between Bradley and Cafferty's (2001) review and Van Assche et al's (2013) review.

This current review included the majority of the same studies as were included by Van Assche et al (2013). Given the methodological flaws (which were also highlighted by Van Assche et al, 2013 and Bradley & Cafferty, 2001), the additional difficulty highlighted by this review of lack of replicated studies and lack of minimisation of bias, it is argued that findings must remain as tentative and preliminary. This review agrees with Van Assche et al.'s (2013) suggestion that attachment to place and pets should be separated from the research investigating attachment within human to human relationships as inclusion is likely to broaden the attachment construct unnecessarily. Similarly, this study agrees that longitudinal and large population representational studies would be highly useful. Therefore, this review may echo Van Assche et al (2013) in some areas, but it also considers Van Assche et al (2013) to have over emphasised the impact of the results they found. Considering those results were drawn from significantly methodologically flawed studies, this review strongly suggests that caution is advisable in relying on those findings. This review suggests that before the research field further diversifies (for example Van Assche et al's (2013) recommendation for future research to examine

the neurobiological basis of attachment in older age) there is a more pressing need for future research to refine and replicate findings, controlling for or minimising the methodological limitations highlighted by all previous reviews.

Synthesis of findings

Attachment classifications are relevant to older people, aged 60 years and over.

There is an emerging evidence base of the different ways attachment styles may impact upon several issues that are particularly salient for this age group such as perceptions of medical burden and life satisfaction, however these findings should be interpreted with caution as there is insufficient data to draw any definite conclusions.

The majority of studies adopted measures that have been well validated and evidenced to be reliable within a younger age group (i.e. adults aged less than 60 years old). However there has been limited evidence of studies exploring if these same measures are valid and reliable to use with older people. Few studies investigated the impact of significant life events on attachment styles. As yet it is unclear whether the distribution of attachment styles differ in an older people population compared to younger adults, however the studies investigating this have significant methodological limitations and therefore these findings should be interpreted with caution.

Suggestions for future research

Longitudinal research would be able to investigate if attachment styles change as we grow older, as a result of life events, or whether there is evidence of cohort effects which result in there being a different distribution of attachment styles in the older population. Furthermore, future research should investigate the validity and reliability

of using the attachment measures developed for use within a younger age group within an older aged population. Given that research into attachment styles tend to be observational in nature, more attention should be paid to demonstrating evidence of minimisation in bias. As yet there has been no research investigating the link between attachment styles and outcome of psychological intervention in older people. This would be an extension of the current research base, examined in this review, which linked attachment styles to psychological adjustment, emotion processing and PTSD. In general, further research is needed to demonstrate replicability to draw implications of attachment in older people.

Limitations of this current review

Due to the lack of availability of translation services it was not possible to include studies that were not published in the English language. This may have resulted in valued contributions to the research base being missed. In addition, due to the variety of measures and methodologies used it was not possible to conduct a meta-analysis of statistical results. This paper has instead grouped the findings of the studies included in the review according to themes. In addition, there was insufficient evidence from which to draw conclusions, possibly limiting the impact and replication of this review.

3.7 Conclusions

The results of this review suggest that attachment is of relevance to the older people population. Attachment was found to be linked with a variety of psychological constructs, however as yet there is a paucity of research investigating the link between attachment and psychological outcomes in older people. This review found that a variety of measures have been used to investigate attachment with an older

people population however few studies reported upon the validity of using these measures with older people. All the studies were observational in nature and in terms of quality very few reported evidence of minimisation of bias. This demonstrates that although there is a developing evidence base of attachment theory's relevance to older people, research in this population has some way to go before reaching the same high quality depth of investigation that has been conducted with infants and younger adults.

3.8 References

Ainsworth, M. D. (1985). Attachments across the life span. *Bulletin of the New York Academy of Medicine*, 61(9), 792-812.

Ainsworth, M. D. S., & Bell, S. M. (1970). Attachment, exploration, and separation: Illustrated by the behavior of one-year-olds in a strange situation. *Child Development*, , 49-67.

Ainsworth, M. D. S., & Parkes, C. M. (1991). Attachments and other affectional bonds across the life cycle. *Attachment Across the Life Cycle*, , 33-51.

Asendorpf, J., Banse, R., Wilpers, S., & Neyer, F. (1997). Relationship-specific attachment scales for adults and their validation with network and diary procedures. *Diagnostica*, 43(4), 289-313.

Bakermans-Kranenburg M.J & Van IJzendoorn M.H (2009). No reliable gender differences in attachment across the lifespan. *Behavioral and Brain Sciences*, 32, 22-23.

Barnas MV, Pollina L, & Cummings EM. (1991). Life-span attachment: Relations between attachment and socioemotional functioning in adult women. *Genetic, Social, & General Psychology Monographs*, 117(2), 175-202.

Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, 61(2), 226.

Bowlby, J. (1958). The nature of the child's tie to his mother¹.

Bradley JM, & Cafferty TP. (2001). Attachment among older adults: Current issues and directions for future research. *Attachment & Human Development*, 3(2), 200-221.

Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. *Attachment Theory and Close Relationships*, , 46-76.

Carver, C. S. (1997). Adult attachment and personality: Converging evidence and a new measure. *Personality and Social Psychology Bulletin*, 23(8), 865-883.

Chopik WJ, Edelstein RS, & Fraley RC. (2013). From the cradle to the grave: Age differences in attachment from early adulthood to old age. *Journal of Personality*, 81(2), 171-183.

Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology*, 58(4), 644.

Consedine NS, & Magai C. (2003). Attachment and emotion experience in later life: The view from emotions theory. *Attachment & Human Development*, 5(2), 165-187.

Consedine NS, Fiori KL, Tuck NL, & Merz EM. (2013). Attachment, activity limitation, and health symptoms in later life: The mediating roles of negative (and positive) affect. *Journal of Aging & Health*, 25(1), 56-79.

Cookman, C. (2005). Attachment in older adulthood: Concept clarification.

Journal of Advanced Nursing, 50(5), 528-535. doi:10.1111/j.1365-

2648.2005.03435.x

Cozzarelli, C., Karafa, J. A., Collins, N. L., & Tagler, M. J. (2003). Stability and change in adult attachment styles: Associations with personal vulnerabilities, life events, and global constructs of self and others. *Journal of Social and Clinical Psychology*, 22(3), 315-346.

Critical Appraisal Skills Programme (UK). (2013). Critical appraisal skills programme - cohort studies checklist. Retrieved from <http://www.casp-uk.net/#!/casp-tools-checklists/c18f8> [accessed on 08.01.2015]

Daniel, S. I. (2006). Adult attachment patterns and individual psychotherapy: A review. *Clinical Psychology Review*, 26(8), 968-984.

Davila, J., & Sargent, E. (2003). The meaning of life (events) predicts changes in attachment security. *Personality & Social Psychology Bulletin*, 29(11), 1383-1395.

Diehl M, Elnick AB, Bourbeau LS, & Labouvie-Vief G. (1998). Adult attachment styles: Their relations to family context and personality. *Journal of Personality & Social Psychology*, 74(6), 1656-1669.

Dieperink M, Leskela J, Thuras P, & Engdahl B. (2001). Attachment style classification and posttraumatic stress disorder in former prisoners of war. *American Journal of Orthopsychiatry*, 71(3), 374-378.

- Fraley, R. C., Heffernan, M. E., Vicary, A. M., & Brumbaugh, C. C. (2011). The experiences in close relationships—Relationship structures questionnaire: A method for assessing attachment orientations across relationships. *Psychological Assessment, 23*(3), 615.
- Fraley, R. C., Vicary, A. M., Brumbaugh, C. C., & Roisman, G. I. (2011). Patterns of stability in adult attachment: An empirical test of two models of continuity and change. *Journal of Personality and Social Psychology, 101*(5), 974.
- Fraley, R. C., Waller, N. G., & Brennan, K. A. (2000). An item response theory analysis of self-report measures of adult attachment. *Journal of Personality and Social Psychology, 78*(2), 350.
- George, C., & Kaplan, N., & Main, M. (1985). *The adult attachment interview*. Unpublished manuscript.
- Griffin, D. W., & Bartholomew, K. (1994). Models of the self and other: Fundamental dimensions underlying measures of adult attachment. *Journal of Personality and Social Psychology, 67*(3), 430.
- Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology, 52*(3), 511.
- Hazan, C., & Shaver, P. R. (1990). Love and work: An attachment-theoretical perspective. *Journal of Personality and Social Psychology, 59*(2), 270.
- Jain E, & Labouvie-Vief G. (2010). Compensatory effects of emotion avoidance in adult development. *Biological Psychology, 84*(3), 497-513.

Kirchmann, H., Fenner, A., & Strauss, B. (2007). Convergence of the adult attachment prototype rating (AAPR) with different self assessment measures of attachment characteristics. [Konvergenz des Erwachsenen-Bindungsprototypen-Ratings (EBPR) mit verschiedenen Selbstbeschreibungsinstrumenten zur Erfassung von Bindungsmerkmalen] *Psychotherapie, Psychosomatik, Medizinische Psychologie*, 57(8), 334-342. doi:10.1055/s-2007-970797 [doi]

Kirchmann, H., Nolte, T., Runkewitz, K., Bayerle, L., Becker, S., Blasczyk, V. & Strauss, B. (2013). Associations between adult attachment characteristics, medical burden, and life satisfaction among older primary care patients. *Psychology and Aging*, 28(4), 1108-1114.

Klug G, Lacruz ME, Emeny RT, Hafner S, Ladwig KH, & Huber D. (2014). Aging without depression: A cross-sectional study. *Psychodynamic Psychiatry*, 42(1), 5-22.

Lipson-Parra, H. (1990). Development and validation of the adult attachment scale. *Issues in Mental Health Nursing*, 11(1), 79-92.

Long MV, & Martin P. (2000). Personality, relationship closeness, and loneliness of oldest old adults and their children. *Journals of Gerontology Series B-Psychological Sciences & Social Sciences*, 55(5), P311-9.

Magai C, Cohen C, Milburn N, Thorpe B, McPherson R, & Peralta D. (2001). Attachment styles in older European American and African American adults. *Journals of Gerontology Series B-Psychological Sciences & Social Sciences*, 56(1), S28-35.

Magai, C., Consedine, N. S., Gillespie, M., O'Neal, C., & Vilker, R. (2004). The differential roles of early emotion socialization and adult attachment in adult emotional experience: Testing a mediator hypothesis. *Attachment and Human Development, 6*(4), 389-417.

Merz EM, & Consedine NS. (2009). The association of family support and wellbeing in later life depends on adult attachment style. *Attachment & Human Development, 11*(2), 203-221.

Merz EM, & Consedine NS. (2012). Ethnic group moderates the association between attachment and well-being in later life. *Cultural Diversity & Ethnic Minority Psychology, 18*(4), 404-415.

Mikulincer, M., & Orbach, I. (1995). Attachment styles and repressive defensiveness: The accessibility and architecture of affective memories. *Journal of Personality and Social Psychology, 68*(5), 917.

Montague DP, Magai C, Consedine NS, & Gillespie M. (2003). Attachment in african american and european american older adults: The roles of early life socialization and religiosity. *Attachment & Human Development, 5*(2), 188-214.

Perren S, Schmid R, Herrmann S, & Wettstein A. (2007). The impact of attachment on dementia-related problem behavior and spousal caregivers' well-being. *Attachment & Human Development, 9*(2), 163-178.

Pilkonis, P. A. (1988). Personality prototypes among depressives: Themes of dependency and autonomy. *Journal of Personality Disorders, 2*(2), 144-152.

Ravitz, P., Maunder, R., Hunter, J., Sthankiya, B., & Lancee, W. (2010). Adult attachment measures: A 25-year review. *Journal of Psychosomatic Research*, 69(4), 419-432.

Roisman, G. I., Holland, A., Fortuna, K., Fraley, R. C., Clausell, E., & Clarke, A. (2007). The adult attachment interview and self-reports of attachment style: An empirical rapprochement. *Journal of Personality and Social Psychology*, 92(4), 678.

Rusby JS, & Tasker F. (2008). Childhood temporary separation: Long-term effects of the british evacuation of children during world war 2 on older adults' attachment styles. *Attachment & Human Development*, 10(2), 207-221.

Sanderson, S., Tatt, I. D., & Higgins, J. P. (2007). Tools for assessing quality and susceptibility to bias in observational studies in epidemiology: A systematic review and annotated bibliography. *International Journal of Epidemiology*, 36(3), 666-676. doi:dym018 [pii]

Scharfe, E., & Bartholomew, K. (1994). Reliability and stability of adult attachment patterns. *Personal Relationships*, 1(1), 23-43.

Scottish Intercollegiate Guidelines Network (SIGN). (20/11/2012). Scottish intercollegiate guidelines network (SIGN) Methodology Checklist 3: Cohort studies. Retrieved from <http://www.sign.ac.uk/methodology/checklists.html>

Scottish Intercollegiate Guidelines Network. (2004 [accessed on 06.01.2015]). Methodology checklist 1: Systematic reviews and meta-analyses. Retrieved from <http://www.sign.ac.uk/methodology/checklists.html>

Scottish Intercollegiate Guidelines Network. (2012 [accessed on 06.01.2015]).

Methodology checklist 2: Randomised controlled trials. Retrieved from

<http://www.sign.ac.uk/methodology/checklists.html>

Segal DL, Needham TN, & Coolidge FL. (2009). Age differences in attachment orientations among younger and older adults: Evidence from two self-report measures of attachment. *International Journal of Aging & Human Development*, 69(2), 119-132.

Sibley, C. G., Fischer, R., & Liu, J. H. (2005). Reliability and validity of the revised experiences in close relationships (ECR-R) self-report measure of adult romantic attachment. *Personality & Social Psychology Bulletin*, 31(11), 1524-1536.
doi:31/11/1524 [pii]

Strauss, B., Lobo-Drost, A., & Pilkonis, P. (1999). Assessment of attachment styles in adults-preliminary experiences with the german version of prototype evaluation. *Zeitschrift Fur Klinische Psychologie Psychiatrie Und Psychotherapie*, 47(4), 347-364.

Van Assche, L., Luyten, P., Bruffaerts, R., Persoons, P., van de Ven, L., & Vandenbulcke, M. (2013). Attachment in old age: Theoretical assumptions, empirical findings and implications for clinical practice. *Clinical Psychology Review*, 33(1), 67-81.

Van IJzendoorn, M. (1995). Adult attachment representations, parental responsiveness, and infant attachment: A meta-analysis on the predictive validity of the adult attachment interview. *Psychological Bulletin*, 117(3), 387.

Van Ijzendoorn, M. H., Schuengel, C., & BAKERMANS–KRANENBURG, M. J. (1999). Disorganized attachment in early childhood: Meta-analysis of precursors, concomitants, and sequelae. *Development and Psychopathology*, 11(02), 225-250.

Verdecias, R. N., Jean-Louis, G., Zizi, F., Casimir, G. J., & Browne, R. C. (2009). Attachment styles and sleep measures in a community-based sample of older adults. *Sleep Medicine*, 10(6), 664-667.

Von Elm, E., Altman, D. G., Egger, M., Pocock, S. J., Gøtzsche, P. C., Vandenbroucke, J. P., & Strobe Initiative. (2007). The strengthening the reporting of observational studies in epidemiology (STROBE) statement: Guidelines for reporting observational studies. *Preventive Medicine*, 45(4), 247-251.

Waters, E., Merrick, S., Treboux, D., Crowell, J., & Albersheim, L. (2000). Attachment security in infancy and early adulthood: A twenty-year longitudinal study. *Child Development*, , 684-689.

Waugh MJ, Robbins I, Davies S, & Feigenbaum J. (2007). The long-term impact of war experiences and evacuation on people who were children during world war two. *Aging & Mental Health*, 11(2), 168-174.

Webster, J. D. (1997). Attachment style and well-being in elderly adults: A preliminary investigation. *Canadian Journal on Aging*, 16(1), 101-111.

Chapter 4 - Appendices

Appendix 1 - Psychology and Psychotherapy: Theory, Research & Practice – Author Guidelines

Psychology and Psychotherapy: Theory Research and Practice (formerly The British Journal of Medical Psychology) is an international scientific journal with a focus on the psychological aspects of mental health difficulties and well-being; and psychological problems and their psychological treatments. We welcome submissions from mental health professionals and researchers from all relevant professional backgrounds. The Journal welcomes submissions of original high quality empirical research and rigorous theoretical papers of any theoretical provenance provided they have a bearing upon vulnerability to, adjustment to, assessment of, and recovery (assisted or otherwise) from psychological disorders. Submission of systematic reviews and other research reports which support evidence-based practice are also welcomed, as are relevant high quality analogue studies. The Journal thus aims to promote theoretical and research developments in the understanding of cognitive and emotional factors in psychological disorders, interpersonal attitudes, behaviour and relationships, and psychological therapies (including both process and outcome research) where mental health is concerned. Clinical or case studies will not normally be considered except where they illustrate particularly unusual forms of psychopathology or innovative forms of therapy and meet scientific criteria through appropriate use of single case experimental designs.

1. Circulation

The circulation of the Journal is worldwide. Papers are invited and encouraged from authors throughout the world.

2. Length

All articles submitted to PAPT must adhere to the stated word limit for the particular article type. The journal operates a policy of returning any papers that are over this word limit to the authors. The word limit does not include the abstract, reference list, figures and tables. Appendices however are included in the word limit. The Editors retain discretion to publish papers beyond this length in cases where the clear and concise expression of the scientific content requires greater length (e.g., a new theory or a new method). The authors should contact the Editors first in such a case.

Word limits for specific article types are as follows:

- Research articles: 5000 words
- Qualitative papers: 6000 words
- Review papers: 6000 words
- Special Issue papers: 5000 words

3. Brief reports

These should be limited to 1000 words and may include research studies and theoretical, critical or review comments whose essential contribution can be made briefly. A summary of not more than 50 words should be provided.

4. Submission and reviewing

All manuscripts must be submitted via <http://www.editorialmanager.com/paptrap/>. The Journal operates a policy of anonymous peer review. Before submitting, please read the [terms and conditions of submission](#) and the [declaration of competing interests](#).

5. Manuscript requirements

- Contributions must be typed in double spacing with wide margins. All sheets must be numbered.
- Manuscripts should be preceded by a title page which includes a full list of authors and their affiliations, as well as the corresponding author's contact details. A template can be downloaded [here](#).
- The main document must be anonymous. Please do not mention the authors' names or affiliations (including in the Method section) and refer to any previous work in the third person.
- Tables should be typed in double spacing, each on a separate page with a self-explanatory title. Tables should be comprehensible without reference to the text. They should be placed at the end of the manuscript but they must be mentioned in the text.
- Figures can be included at the end of the document or attached as separate files, carefully labelled in initial capital/lower case lettering with symbols in a form consistent with text use. Unnecessary background patterns, lines and shading should be avoided. Captions should be listed on a separate sheet. The resolution of digital images must be at least 300 dpi. All figures must be mentioned in the text.
- For articles containing original scientific research, a structured abstract of up to 250 words should be included with the headings: Objectives, Design, Methods, Results, Conclusions. Review articles should use these headings: Purpose, Methods, Results, Conclusions.
- All Articles must include Practitioner Points – these are 2-4 bullet points, in addition to the abstract, with the heading 'Practitioner Points'. These should briefly and clearly outline the relevance of your research to professional practice.
- For reference citations, please use APA style. Particular care should be taken to ensure that references are accurate and complete. Give all journal titles in full and provide DOI numbers where possible for journal articles.
- SI units must be used for all measurements, rounded off to practical values if appropriate, with the imperial equivalent in parentheses.
- In normal circumstances, effect size should be incorporated.
- Authors are requested to avoid the use of sexist language.
- Authors are responsible for acquiring written permission to publish lengthy quotations, illustrations, etc. for which they do not own copyright.

- Manuscripts describing clinical trials must be submitted in accordance with the CONSORT statement on reporting randomised controlled trials (<http://www.consort-statement.org>).
- Manuscripts describing systematic reviews and meta-analyses must be submitted in accordance with the PRISMA statement on reporting systematic reviews and meta-analyses (<http://www.prisma-statement.org>).

For guidelines on editorial style, please consult the [APA Publication Manual](#) published by the American Psychological Association.

6. Multiple or Linked submissions

Authors considering submitting two or more linked submissions should discuss this with the Editors in the first instance.

7. Supporting Information

PAPT is happy to accept articles with supporting information supplied for online only publication. This may include appendices, supplementary figures, sound files, videoclips etc. These will be posted on Wiley Online Library with the article. The print version will have a note indicating that extra material is available online. Please indicate clearly on submission which material is for online only publication. Please note that extra online only material is published as supplied by the author in the same file format and is not copyedited or typeset. Further information about this service can be found at <http://authorservices.wiley.com/bauthor/suppmat.asp>

8. Copyright and licenses

If your paper is accepted, the author identified as the formal corresponding author for the paper will receive an email prompting them to login into Author Services, where via the Wiley Author Licensing Service (WALS) they will be able to complete the license agreement on behalf of all authors on the paper.

For authors signing the copyright transfer agreement

If the Online Open option is not selected the corresponding author will be presented with the copyright transfer agreement (CTA) to sign. The terms and conditions of the CTA can be previewed in the samples associated with the [Copyright FAQs](#).

For authors choosing Online Open

If the Online Open option is selected the corresponding author will have a choice of the following Creative Commons License Open Access Agreements (OAA):

- Creative Commons Attribution Non-Commercial License OAA
- Creative Commons Attribution Non-Commercial -NoDerivs License OAA

To preview the terms and conditions of these open access agreements please visit the [Copyright FAQs](#) and you may also like to visit the [Wiley Open Access and Copyright Licence](#) page.

If you select the Online Open option and your research is funded by The Wellcome Trust and members of the Research Councils UK (RCUK) or Austrian Science Fund (FWF) you will be given the opportunity to publish your article under a CC-BY license supporting you in complying with your Funder requirements. For more information on this policy and the Journal's compliant self-archiving policy please visit our [Funder Policy](#) page.

9. Colour illustrations

Colour illustrations can be accepted for publication online. These would be reproduced in greyscale in the print version. If authors would like these figures to be reproduced in colour in print at their expense they should request this by completing a Colour Work Agreement form upon acceptance of the paper. A copy of the Colour Work Agreement form can be downloaded [here](#).

10. Pre-submission English-language editing

Authors for whom English is a second language may choose to have their manuscript professionally edited before submission to improve the English. A list of independent suppliers of editing services can be found at http://authorservices.wiley.com/bauthor/english_language.asp. All services are paid for and arranged by the author, and use of one of these services does not guarantee acceptance or preference for publication.

11. Online Open

Online Open is available to authors of primary research articles who wish to make their article available to non-subscribers on publication, or whose funding agency requires grantees to archive the final version of their article. With Online Open, the author, the author's funding agency, or the author's institution pays a fee to ensure that the article is made available to non-subscribers upon publication via Wiley Online Library, as well as deposited in the funding agency's preferred archive. For the full list of terms and conditions, see http://wileyonlinelibrary.com/onlineopen#OnlineOpen_Terms

Any authors wishing to send their paper Online Open will be required to complete the payment form available from our website at: <https://onlinelibrary.wiley.com/onlineOpenOrder>

Prior to acceptance there is no requirement to inform an Editorial Office that you intend to publish your paper Online Open if you do not wish to. All Online Open articles are treated in the same way as any other article. They go through the journal's standard peer-review process and will be accepted or rejected based on their own merit.

12. Author Services

Author Services enables authors to track their article – once it has been accepted – through the production process to publication online and in print. Authors can check the status of their articles online and choose to receive automated e-mails at key stages of production. The author will receive an e-mail with a unique link that enables them to register and have their article automatically added to the system.

Please ensure that a complete e-mail address is provided when submitting the manuscript. Visit <http://authorservices.wiley.com/bauthor/> for more details on online production tracking and for a wealth of resources including FAQs and tips on article preparation, submission and more.

13. The Later Stages

The corresponding author will receive an email alert containing a link to a web site. A working e-mail address must therefore be provided for the corresponding author. The proof can be downloaded as a PDF (portable document format) file from this site. Acrobat Reader will be required in order to read this file. This software can be downloaded (free of charge) from the following web site: <http://www.adobe.com/products/acrobat/readstep2.html>. This will enable the file to be opened, read on screen and annotated direct in the PDF. Corrections can also be supplied by hard copy if preferred. Further instructions will be sent with the proof. Hard copy proofs will be posted if no e-mail address is available. Excessive changes made by the author in the proofs, excluding typesetting errors, will be charged separately.

14. Early View

Psychology and Psychotherapy is covered by the Early View service on Wiley Online Library. Early View articles are complete full-text articles published online in advance of their publication in a printed issue. Articles are therefore available as soon as they are ready, rather than having to wait for the next scheduled print issue. Early View articles are complete and final. They have been fully reviewed, revised and edited for publication, and the authors' final corrections have been incorporated. Because they are in final form, no changes can be made after online publication. The nature of Early View articles means that they do not yet have volume, issue or page numbers, so they cannot be cited in the traditional way. They are cited using their Digital Object Identifier (DOI) with no volume and issue or pagination information. E.g., Jones, A.B. (2010). Human rights Issues. *Human Rights Journal*. Advance online publication. doi:10.1111/j.1467-9299.2010.00300.x

Further information about the process of peer review and production can be found in this document. [What happens to my paper?](#)

Appendix 2 – Ethical Approval

EoSRES



Research Ethics Service

East of Scotland Research Ethics Service (EoSRES) REC 1

Tayside Medical Sciences Centre (TASC)
Residency Block C, Level 3
Ninewells Hospital & Medical School
George Pirie Way
Dundee DD1 9SY

Ms Suzanne L Johncock
Trainee Clinical Psychologist
NHS Tayside/ NHS Education for Scotland
c/o Dr Fiona Macleod
Consultant Clinical Psychologist
NHS Tayside Older People Psychological Therapy Service
Stracathro Hospital
Breachin, Angus

Date: 02 April 2014
Your Ref:
Our Ref: LR/14/ES/0040
Enquiries to: Mrs Lorraine Reilly
Direct Line: 01382 383878
Email: eosres.tayside@nhs.net

Dear Ms Johncock

Study title: Older People's Perceptions of the 'Key Ingredients' that Facilitate / Hinder Therapeutic Change and the Processes by which Change Occurs? A Qualitative Investigation.
REC reference: 14/ES/0040
IRAS project ID: 136186

The Research Ethics Committee reviewed the above application at the meeting held on 21 March 2014. Thank you, Dr Helen Nicholson & Dr Fiona MacLeod for attending to discuss the application.

We plan to publish your research summary wording for the above study on the HRA website, together with your contact details, unless you expressly withhold permission to do so. Publication will be no earlier than three months from the date of this favourable opinion letter. Should you wish to provide a substitute contact point, require further information, or wish to withhold permission to publish, please contact the REC Manager Mrs Lorraine Reilly, lorraine.reilly@nhs.net.

Ethical opinion

1. The Committee wondered how the researcher's categorised older people over the age of 65 years – Ms Johncock confirmed that there was a distinction and they wanted to know if there was a difference between different age groups.
2. The Committee felt that it could be perceived as coercive for participants to receive the Participant Information Sheet at their last psychological therapy session and asked if they are willing to receive a phone call within 3 days. The Committee felt it would be better for participants to have an opt-in slip attached to the Participant Information Sheet for participants to send back, email or telephone to confirm they are interested in taking part in the study – Dr MacLeod confirmed that the participants were only giving their consent to be contacted 3 days later not their consent to take part in the study that was why the Participant Information Sheet was given out at the last session to ensure participants that it would not affect their care if they did not take part in the project, but agreed that an opt-in method could be used.



The members of the Committee present gave a favourable ethical opinion of the above research on the basis described in the application form, protocol and supporting documentation, subject to the conditions specified below.

Ethical review of research sites

NHS Sites

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" below).

Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

1. Regarding the application form:
 - The Committee required clarification on the start date as A69-1 stated the start date as 06/01/2014 however the committee meeting reviewing the application took place on 21/03/2014.
2. Regarding the Participant Information Sheet (PIS):
 - The Committee commented that an opt-in slip should be attached to the Participant Information Sheet for participants to send back, email or telephone to confirm they are interested in taking part in the study.
 - A sentence should be included informing participants that the questionnaires looked at mental health history of participants.
3. Regarding the Consent form:
 - There should be a space in the first statement to include the version number and date of the Participant Information Sheet.
 - Statement 5 'I understand that my clinician will complete a short questionnaire about the therapy I received and the outcome of this treatment. I give permission for this to occur' - please amend as it was not clear that personal information would also be included.

Please submit revised PIS and Consent form, which should include a new version number and new full date.

East of Scotland Research Ethics Service (EoSRES) REC 1

Tayside Medical Sciences Centre (TASC)
 Residency Block C, Level 3
 Ninewells Hospital & Medical School
 George Pirie Way
 Dundee DD1 9SY

Ms Suzanne L Johncock
 Trainee Clinical Psychologist
 NHS Tayside/ NHS Education for Scotland
 c/o Dr Fiona Macleod
 Consultant Clinical Psychologist
 NHS Tayside Older People Psychological Therapy Service
 Stracathro Hospital
 Brechin, Angus

Date: 04 April 2014
 Your Ref:
 Our Ref: LR/14/ES/0040
 Enquiries to: Mrs Lorraine Reilly
 Direct Line: 01382 383878
 Email: eosres.tayside@nhs.net

Dear Ms Johncock

Study title: Older People's Perceptions of the 'Key Ingredients' that Facilitate / Hinder Therapeutic Change and the Processes by which Change Occurs? A Qualitative Investigation.

REC reference: 14/ES/0040

IRAS project ID: 136186

Thank you for your email of 04 April 2014. I can confirm the REC has received the documents listed below and that these comply with the approval conditions detailed in our letter dated 02 April 2014

Documents received

The documents received were as follows:

Document	Version	Date
Participant Consent Form: 1	3	04 April 2014
Participant Information Sheet	3	04 April 2014
Protocol	4	04 April 2014
Response to Request for Further Information		04 April 2014

Approved documents

The final list of approved documentation for the study is therefore as follows:

Document	Version	Date
Evidence of insurance or indemnity		25 March 2013
GP/Consultant Information Sheets	1	06 December 2013
Investigator CV – Ms Johncock		27 January 2014
Investigator CV – Dr Nicholson-Langley		04 January 2014
Investigator CV – Dr Griffiths		04 December 2013

Investigator CV – Dr MacLeod		
Letter of invitation to participant	2	31 January 2014
Other: Flow chart	3	31 January 2014
Other: Interview protocol	2	06 December 2013
Other: NHS R & D Form		27 February 2014
Other: NHS SSI form		27 February 2014
Other: Email Regarding Sponsor letter		05 March 2014
Participant Consent Form: 2	2	31 January 2014
Participant Consent Form: 1	3	04 April 2014
Participant Information Sheet	3	04 April 2014
Protocol	4	04 April 2014
Questionnaire: Demographic	3	31 January 2014
REC application		27 February 2014
Response to Request for Further Information		04 April 2014

You should ensure that the sponsor has a copy of the final documentation for the study. It is the sponsor's responsibility to ensure that the documentation is made available to R&D offices at all participating sites.

14/ES/0040:	<i>Please quote this number on all correspondence</i>
--------------------	--

Yours sincerely



Mrs Lorraine Reilly
Senior REC Co-ordinator

eosres.tayside@nhs.net

Copy to: Charlotte Clarke, University of Edinburgh
NHS Tayside R&D office

Appendix 3 – Participant Information Sheet

Ms. Suzie Johncock
Trainee Clinical Psychologist
c/o Dr Fiona Macleod
Older People Psychological Therapies Service,
Stracathro Hospital
Breachin
Angus

Dear Sir/ Madam,

RE: Older People's Perceptions of Change in Psychological Therapy

You are invited to take part in a research study conducted as part fulfilment of the Doctorate of Clinical Psychology qualification. Before you decide if you would like to take part I (S. Johncock, Trainee Clinical Psychologist and Chief Investigator) would like you to understand why the research is being done and if you consent to participate what it will involve for you. Your clinician will go through this information sheet with you and if you agree to be contacted I will also explain the study to you over the telephone.

You can talk to other people about the study if you wish. Please ask your clinician or me if you have any questions. Thank you for taking the time to read this information leaflet

Yours sincerely

Suzie Johncock

Trainee Clinical Psychologist, Older People Psychological Therapies Service

Participant Information Sheet

Part 1

What is the purpose of the study?

We know that psychological therapy is effective for adults of all ages. However we do not fully understand the process **how** this change occurs for different people. Several studies have been undertaken to try to understand the 'how' of therapy, but so far no one has looked at this specifically for people aged 65 years and over). This study aims to address this gap.

Why have I been invited to participate in this research?

Your views as a client who undertook psychological therapy are very important, even if you did not experience as much change as you would have liked. This is because your views will help us understand how we can make therapy better for future clients. Your clinician has asked you take part because you have been seen within NHS Tayside Older People Psychological Therapies Service and you are now coming towards the end of therapy.

Do I have to take part?

No. It is up to you to decide if you would like to take part in the study. Participation in the project is entirely voluntary. If you do decide to take part in the study and then change your mind and decide to withdraw this is also ok and you do not have to provide an explanation. If, at any time, you decide that you no longer wish take part this will not impact on any current or future care and treatment you receive and **all identifiable** information you have given up until this point will be destroyed, however some **anonymous** information may be kept if it would be helpful to the study.

Expenses and Payments

Unfortunately I am not in a position to be able to reimburse you for expenses (such as travel) or pay you for your participation in this research study.

What will happen if I do take part?

If you decide to take part your clinician will ask you to sign a 'consent to be contacted' form. If you sign this you are agreeing that I may contact you to tell you more about the study, give you the chance to ask any questions and to arrange when and where we will meet to do the interview. This telephone call will last less than 20 minutes. With your consent, your clinician will also complete a short background information questionnaire about you and the psychological treatment you received. This will help me understand your answers to the interview better.

In the interview I will ask you some questions about

- Any changes you have noticed since you started psychological therapy
- How these changes happened
- What was unhelpful about your experiences of psychological therapy
- What you expected to happen in psychological therapy
- And how we could make psychological therapy better.

Please note that the interview is not another part or continuation of your psychological therapy, rather it is designed to gain your views of what you experienced in the psychological therapy you have already had.

This will take no more than 60 minutes and you can have as many breaks as you need. If you wish we could also split the interview into 2 shorter interviews.

What will I have to do?

If you decide to take part I will contact you by telephone. There will only be a small number of interviews because otherwise I might not be able to look at the information from the interviews in enough detail. I will contact people within 72 hours of receiving word from the clinician that you want to take part.

During the telephone call from myself (if you agree to take part in the research), we will arrange a time and place to do the interview, that suits you. If it is easier for you I can come and see you at home or we can meet at one of the Older People Psychological Therapies clinic venues.

It is no problem if you wish to rearrange the appointment if it is no longer convenient for you.

What are the possible disadvantages of taking part?

60 minutes of interview might feel like a long time. I am aware of this and am happy to have breaks during the interview. We could also split the interview over 2 meetings. We can discuss this on the telephone before the interview or during the interview.

What are the possible benefits of taking part?

This study gives you a chance to talk about your experience and understandings of therapy. Your answers will help us understand more about how therapy works. I cannot promise the study will help you personally. However the results of this study may help us to improve the therapy that we offer future clients.

What happens when the research study ends?

When I have finished all the interviews and analysed the data I can send you a summary of what I found and you can give me feedback, if you wish. I can then include your feedback into the final report. After I have submitted the report I can also send you a summary of the main findings.

The report will be submitted as part fulfilment of a Doctorate Clinical Psychology. The summary report will be produced from this document. The full report will also be submitted for publication in a peer reviewed journal.

What if there is a problem?

If you believe that you have been harmed in any way by taking part in this study, you have the right to pursue a complaint and seek any resulting compensation through the University of Edinburgh who are acting as the research sponsor. Also, you have the right to pursue a complaint through the usual NHS complaints process.

To do so, you can submit a written complaint to:

Patient Liaison Manager,
Complaints Office,

Ninewells Hospital,
Dundee, DD1 9SY
(Freephone: 0800 027 5507).

Note that the NHS has no legal liability for non-negligent harm. However, if you are harmed and this is due to someone's negligence, you may have grounds for a legal action against NHS Tayside but you may have to pay your legal expenses.

If you don't agree with any part of this study, you can also speak to my supervisors:

Clinical Supervisors:

Dr Fiona Macleod,
Consultant Clinical Psychologist,
Older People Psychological
Therapies Service
Susan Carnegie Centre,
Stracathro Hospital,
By Brechin,
DD9 7QA
Tel: 01356 692806

Dr Helen Nicholson - Langley
Clinical Psychologist,
Older People Psychological,
Therapies Service,
First Floor, Kingsway Care Centre,
Kings Cross Road,
Dundee,
DD2 3PT
Tel: 01382 647299/647247

Academic Supervisor:

Dr Helen Griffiths
Clinical Psychologist,
Rm 2.14, Doorway 6,
School of Health and Social Science,
University of Edinburgh,
Teviot Place,
Edinburgh,
EH8 9AG
Tel: 0131 650 3482

Will my taking part in the study be kept confidential?

Yes. I will follow ethical and legal policies and all information about you will be handled in confidence. Your interviews will be audio recorded and transcribed, but all identifiable information will be removed from this and all the information will be completely anonymous. This way no-one (including your clinician) will know it is you being referred to in the final report. Also clinicians will not be aware of who was contacted and who was not, this also protects your confidentiality.

The only time that confidentiality will be breached is in the instance that you identify that either yourself or someone else is at risk of harm. If I am worried about your safety or the safety of someone else I am duty bound to report this to the relevant organisation (e.g. medical services or social work colleagues). If I am worried that you might seriously harm yourself (e.g. suicide) I will pass my concern to your GP, your former clinician and any other team (Older People's Services) members who are currently involved in your care. This is to keep you safe. If this was required, I would however discuss this with you in the first instance.

What happens now?

If you are interested in taking part in this study and agree to be contacted by the Chief Investigator (myself) to find out more, please complete Consent Form 1, Consent to be contacted. Your Clinical Psychologist will then tell me you have consented and give me your contact details. Once I have received this information I will try to contact you in approximately 72 hours to discuss the study further, answer any questions you may have and arrange a time and location to conduct the interview.

If you are not interested in taking part in this study, this is ok and will not impact on your current or future care in anyway.

If you are interested, once you have completed Consent Form 1, your Clinical Psychologist will give you the second part of this Participant Information Sheet. Please read this before you are telephoned by the Chief Investigator (e.g. in the next 3 days).

I appreciate you taking the time to read this part of the Participant Information Sheet. Thank you.

Part 2

Thank you for expressing the wish to find out more about the study and for completing Consent Form 1.

What will happen if I do not want to carry on with the study?

This is ok. Participation in the project is entirely optional. You can withdraw at any point, even after your interview. You do not have to give a reason about this. If you withdraw, all the identifiable research data about you will be destroyed. However, with your consent, non-identifiable data, which is helpful to the study, may be retained. This is because once the final stages of the analysis starts it will be difficult to identify what information was yours, because it will have been anonymised, this is highlighted on Consent Form 2 which you will be asked to complete if you agree to come to the interview.

What if there is a problem?

If there has been a problem and you are unhappy about any aspect of the project you can raise the issue with myself or any of my supervisors (names and addresses can be found in part 1 of this Participant Information Sheet). If you wish to make a complaint, this will not impact on your current or future care and the details of how to do this are to be found in part 1 of this Participant Information Sheet.

Will my taking part in this study be kept confidential?

In short, yes. Confidentiality will be maintained and will only be breached if you disclose a risk of harm to yourself or another person, in which circumstances I have a duty to pass this information onto my clinical supervisors and the relevant organisations such as your GP or other people involved in your care, such as your nurse or psychiatrist.

All data collected will be made anonymous as soon as possible and your name will be replaced with a pseudonym. Identifiable information such as your consent forms and demographic questionnaires (completed by your clinical psychologist) will be stored on NHS Tayside premises in a locked filing cabinet. No one will have access to this other than the research team (which includes me and my supervisors only). Identifiable information will be destroyed as soon as the study is completed.

Anonymous data will be handed over to the University of Edinburgh for archival.

What happens to the results of the study?

Once I have analysed all the data from all the interviews I will derive a theory of perceptions of psychological change processes. If you wish I could send you a copy of this theory and meet you to discuss your feedback on it. If you wish to do this please complete the relevant section on Consent Form 2. I can also send you a plain English summary of the final report if you wish, again please indicate on Consent Form 2 if you would like to receive this. The full report will be submitted to the University of Edinburgh as part fulfilment of the award of Doctorate in Clinical Psychology. It will also be submitted to a peer reviewed journal for publication and be presented at the NHS Tayside Psychological Therapies Service CPD event.

What will be the involvement of my GP?

Your GP will be notified of your participation in the study, but what you say about your psychological therapy will not be shared with them (i.e. they will not be able to listen to your interview or be able to identify you from the report).

Who is organising and supporting the research?

This research is being completed as part fulfilment of a Doctorate in Clinical Psychology qualification and therefore the University of Edinburgh are supporting this research. NHS Tayside is also supporting this research in conjunction with the University.

Who has reviewed the study?

All research in the NHS is looked at by an independent group of people called a Research Ethics Committee, to protect your interests. This study has been reviewed and given a favourable opinion by (*location to be confirmed*) Research Ethics Committee.

Further Information and Contact Details

If you have any questions about this study please contact me or one of my supervisors, who will be able to get a message to me.

Contact

Suzie Johncock (Trainee Clinical Psychologist, Chief Investigator)

– sjohncock@nhs.net

Dr Fiona Macleod (Consultant Clinical Psychologist, Clinical Supervisor)

- 01356 692806

Dr Helen Nicholson – Langley (Clinical Psychologist, Clinical Supervisor)

- 01382 647299/ 647847

Dr Helen Griffiths – (Clinical Psychologist, Academic Supervisor)

- 0131 650 3482

Thank you for taking time to read this information.

Appendix 4 – Consent Form

Patient Identification Number:

CONSENT FORM 2 – Consent to Take Part

Name of Chief Investigator: **Suzie Johncock**

Please initial all boxes

- | | |
|---|--------------------------|
| 1. I confirm that I have read and understood the information sheet for the above study. | <input type="checkbox"/> |
| 2. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. | <input type="checkbox"/> |
| 3. I understand that my participation is entirely voluntary and that I am free to withdraw at any time without giving any reason and my current or future medical care or rights will not be affected. | <input type="checkbox"/> |
| 4. I agree that if I withdraw from the study any identifiable information will be destroyed. If I withdraw after the interview non-identifiable data may be retained if it is of assistance to the study. | <input type="checkbox"/> |
| 5. I agree to my GP being informed of my participation in the study. | <input type="checkbox"/> |
| 6. I agree to my interview being audio recorded. | <input type="checkbox"/> |
| 7. I agree to take part in the above study. | <input type="checkbox"/> |
| 8. <i>I wish to provide comments on the results following analysis (Optional).</i> | <input type="checkbox"/> |
| 9. <i>I wish to receive a summary of the study report following study completion (Optional).</i> | <input type="checkbox"/> |

Name of Participant

Date

Signature

Chief Investigator

Date

Signature

Appendix 5 – Demographic Questionnaire

Demographics questionnaire – to be completed by clinician

1. Age

65-75 ☐

76-85 ☐

86 + ☐

2. Gender

M ☐

F ☐

3. Prior psychological input/ contact with mental health services

Previous contact with clinical psychology ☐

If so – no. of episodes of psychological treatment ☐

What were they treated for?

Previous contact with mental health services ☐

Psychiatry ☐

no of episodes ☐

CPN/ mental health nurse ☐ no of episodes ☐

Inpatient services ☐ no of episodes ☐

Other ☐ no of episodes ☐

Please specify

4. Current Presenting Problem

5. Psychological Treatment modality

CBT ☐

IPT ☐

CAT ☐

ACT ☐

Psychoanalytic ☐

Other ☐

Please specify

6. Medication – for psychiatric conditions, to treat presenting problems (current)
Please specify medication name and the reason for prescription

7. Number of psychology sessions attended ☐

Number of psychology sessions offered ☐

Clinical Global Impression – Improvement score ☐

At discharge:

Very Much Improved - 1

No Change –4

Very Much Worse - 7

Much Improved – 2

Minimally Worse - 5

Minimally Improved – 3

Much Worse - 6

8. Education level obtained

High School ☐

College ☐

University ☐

Post Graduate Qualification ☐

Work Place/ Vocational Qualification ☐

9. Occupation – either current, or most recent occupation

10. Postcode

11. Additional current non clinical psychology input from Mental Health Services,
including voluntary services

Appendix 6 – Interview Schedule/ Topic Guide

1. Compared to your first session, have you noticed any improvement or changes? (improvement, no change or worse)

2. Tell me about any changes you have noticed since you started therapy

2a. Tell me about any changes 'in yourself' e.g. in the things you do now, how you think about things, how you are feeling (mood), how your body feels (physically), how you understand things or how you get on with others?

3. *If changes are identified* - **What** do you think caused these changes? (In therapy? What about out with therapy?)

4. *If changes are identified* - **How** do you think they caused change? (e.g. sudden 'aha' moment, gradual process, realisation, single one factor or combination of factors)

5. *If changes are identified* – **When** do you think change happened? (e.g. near the start of therapy, near the middle, right at the end, once key pivotal moment or several)

6. Before you started therapy, what changes did you expect to happen?

6a was the outcome of therapy what you expected?

6b tell me about any changes that happened that you were not expecting

6c tell me about any changes that you were expecting that did not happen

7. Tell me about any things that got in the way of what you expected to change.

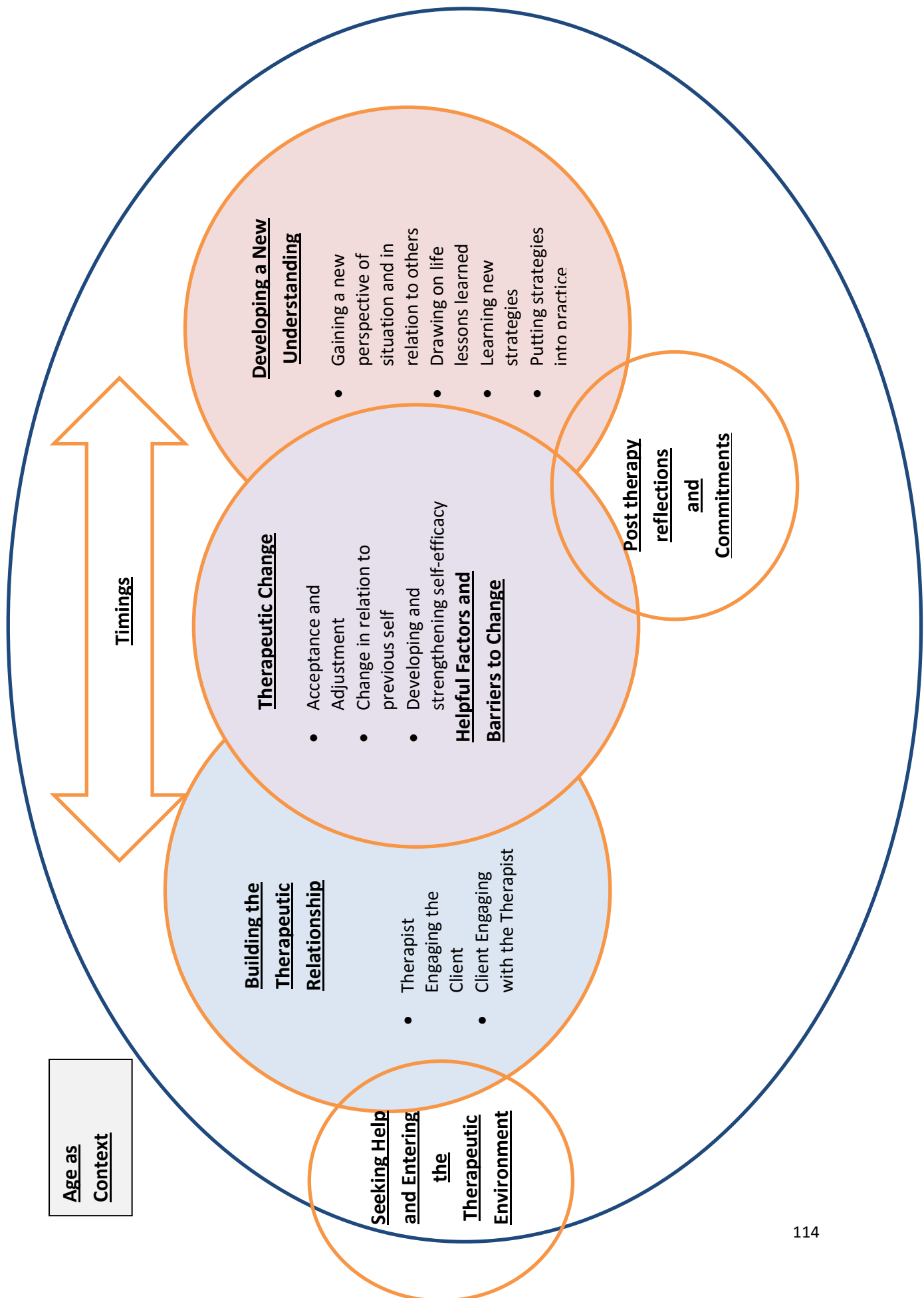
8. Tell me how therapy could have been made better for you

Prompt: tell me about helpful/ unhelpful aspects of therapy that could be changed or modified.

Flesch Readability Ease = 71 (fairly easy)

<http://www.readabilityformulas.com/flesch-reading-ease-readability-formula.php>

Appendix 7 – Change Process Model



Appendix 8 - Author Guidelines – Clinical Psychology Review

AUTHOR INFORMATION PACK 16 Aug 2015 www.elsevier.com/locate/clinpsychrev 1



CLINICAL PSYCHOLOGY REVIEW

AUTHOR INFORMATION PACK

TABLE OF CONTENTS

• Description	p.1
• Audience	p.1
• Impact Factor	p.1
• Abstracting and Indexing	p.2
• Editorial Board	p.2
• Guide for Authors	p.3



ISSN: 0272-7358

DESCRIPTION

Clinical Psychology Review publishes substantive reviews of topics germane to **clinical psychology**. Papers cover diverse issues including: psychopathology, psychotherapy, behavior therapy, cognition and cognitive therapies, behavioral medicine, community mental health, assessment, and child development. Papers should be cutting edge and advance the science and/or practice of clinical psychology.

Reviews on other topics, such as psychophysiology, learning therapy, experimental psychopathology, and social psychology often appear if they have a clear relationship to research or practice in **clinical psychology**. Integrative literature reviews and summary reports of innovative ongoing clinical research programs are also sometimes published. Reports on individual research studies and theoretical treatises or clinical guides without an empirical base are not appropriate.

Benefits to authors

We also provide many author benefits, such as free PDFs, a liberal copyright policy, special discounts on Elsevier publications and much more. Please click here for more information on our [author services](#).

Please see our [Guide for Authors](#) for information on article submission. If you require any further information or help, please visit our support pages: <http://support.elsevier.com>

AUDIENCE

Psychologists and Clinicians in Psychopathy

IMPACT FACTOR

2014: 6.932 © Thomson Reuters Journal Citation Reports 2015

AUTHOR INFORMATION PACK 16 Aug 2015 www.elsevier.com/locate/clinpsychrev 2

ABSTRACTING AND INDEXING

BIOSIS

Behavioral Medicine Abstracts

Current Contents/Social & Behavioral Sciences

EMBASE

PsycINFO Psychological Abstracts

PsycLIT

Psycscan CP

Research Alert

Social Sciences Citation Index

Social and Behavioural Sciences

Scopus

EDITORIAL BOARD

Editor-in-Chief

Alan Bellack

Co-Editor

W.K. Silverman, Ph.D., ABPP, Yale University School of Medicine, New Haven, Connecticut, USA

Editorial Board

R. Baer, University of Kentucky, Lexington, Kentucky, USA

D. Bagner

A. Bardone-Cone, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, USA

H. Berenbaum, University of Illinois at Urbana-Champaign, Champaign, Illinois, USA

L. Booij, McGill University, Montreal, Quebec, Canada

A. Busch, Centers for Behavioral and Preventive Medicine, Providence, Rhode Island, USA

J. Calamari, Rosalind Franklin University of Med. and Science, North Chicago, Illinois, USA

M. Christopher, Pacific University, Forest Grove, Oregon, USA

P. Cuijpers, VU University, Amsterdam, Netherlands

M. Cyders

J. Davis, University of Tulsa, Tulsa, Oklahoma, USA

J.D. Elhai, University of Toledo, Toledo, Ohio, USA

B. Gaudiano, Brown University, Providence, Rhode Island, USA

D. Haaga Ph.D., The American University, Washington, District of Columbia, USA

G. Haas

G. Haeffel, University of Notre Dame, Notre Dame, Indiana, USA

R. Hallam, University of Greenwich, Eltham, London, UK

M. Harrow, University of Illinois College of Medicine, Chicago, Illinois, USA

H. Hazlett-Stevens

E.R. Lebowitz, Yale University School of Medicine, New Haven, Connecticut, USA

E.W. Leen-Feldner, University of Arkansas, Fayetteville, Arkansas, USA

C. Lejuez, University of Maryland, College Park, Maryland, USA

R. Moulding, Deakin University, Melbourne, Victoria, Australia

K. Mueser

J. Petit

S. Pineles, National Center for PTSD, Boston, Massachusetts, USA

C. Purdon, University of Waterloo, Waterloo, Ontario, Canada

K. Rowa, McMaster University, Hamilton, Ontario, Canada

K. Salters-Pedneault, Eastern Connecticut State University, Willimantic, Connecticut, USA

D. Sharpe, University of Regina, Regina, Saskatchewan, Canada

E.A. Storch, University of South Florida, St. Petersburg, Florida, USA

B. Wampold, University of Wisconsin at Madison, Madison, Wisconsin, USA

C.F. Weems, Iowa State University, Ames, Iowa, USA

A. Weinstein

T. Widiger

S. Wilhelm, Harvard Medical School, Boston, Massachusetts, USA

GUIDE FOR AUTHORS

BEFORE YOU BEGIN

Ethics in publishing

For information on Ethics in publishing and Ethical guidelines for journal publication see <http://www.elsevier.com/publishingethics> and <http://www.elsevier.com/journal-authors/ethics>.

Conflict of interest

All authors are requested to disclose any actual or potential conflict of interest including any financial, personal or other relationships with other people or organizations within three years of beginning the submitted work that could inappropriately influence, or be perceived to influence, their work. See also <http://www.elsevier.com/conflictsofinterest>. Further information and an example of a Conflict of Interest form can be found at: http://help.elsevier.com/app/answers/detail/a_id/286/p/7923.

Submission declaration and verification

Submission of an article implies that the work described has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis or as an electronic preprint, see <http://www.elsevier.com/sharingpolicy>), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder. To verify originality, your article may be checked by the originality detection service CrossCheck <http://www.elsevier.com/editors/plagdetect>.

Changes to authorship

This policy concerns the addition, deletion, or rearrangement of author names in the authorship of accepted manuscripts:

Before the accepted manuscript is published in an online issue: Requests to add or remove an author, or to rearrange the author names, must be sent to the Journal Manager from the corresponding author of the accepted manuscript and must include: (a) the reason the name should be added or removed, or the author names rearranged and (b) written confirmation (e-mail, fax, letter) from all authors that they agree with the addition, removal or rearrangement. In the case of addition or removal of authors, this includes confirmation from the author being added or removed. Requests that are not sent by the corresponding author will be forwarded by the Journal Manager to the corresponding author, who must follow the procedure as described above. Note that: (1) Journal Managers will inform the Journal Editors of any such requests and (2) publication of the accepted manuscript in an online issue is suspended until authorship has been agreed.

After the accepted manuscript is published in an online issue: Any requests to add, delete, or rearrange author names in an article published in an online issue will follow the same policies as noted above and result in a corrigendum.

Author Disclosure Policy

Authors must provide three mandatory and one optional author disclosure statements. These statements should be submitted as one separate document and not included as part of the manuscript. Author disclosures will be automatically incorporated into the PDF builder of the online submission system. They will appear in the journal article if the manuscript is accepted. The four statements of the author disclosure document are described below. Statements should not be numbered. Headings (i.e., Role of Funding Sources, Contributors, Conflict of Interest, Acknowledgements) should be in bold with no white space between the heading and the text. Font size should be the same as that used for references.

Statement 1: Role of Funding Sources

Authors must identify who provided financial support for the conduct of the research and/or preparation of the manuscript and to briefly describe the role (if any) of the funding sponsor in study design, collection, analysis, or interpretation of data, writing the manuscript, and the decision to submit the manuscript for publication. If the funding source had no such involvement, the authors should so state.

Example: Funding for this study was provided by NIAAA Grant R01-AA123456. NIAAA had no role in the study design, collection, analysis or interpretation of the data, writing the manuscript, or the decision to submit the paper for publication.

Statement 2: Contributors

Authors must declare their individual contributions to the manuscript. All authors must have materially participated in the research and/or the manuscript preparation. Roles for each author should be described. The disclosure must also clearly state and verify that all authors have approved the final manuscript.

Example: Authors A and B designed the study and wrote the protocol. Author C conducted literature searches and provided summaries of previous research studies. Author D conducted the statistical analysis. Author B wrote the first draft of the manuscript and all authors contributed to and have approved the final manuscript.

Statement 3: Conflict of Interest

All authors must disclose any actual or potential conflict of interest. Conflict of interest is defined as any financial or personal relationships with individuals or organizations, occurring within three (3) years of beginning the submitted work, which could inappropriately influence, or be perceived to have influenced the submitted research manuscript. Potential conflict of interest would include employment, consultancies, stock ownership (except personal investments equal to the lesser of one percent (1%) of total personal investments or USD\$5000), honoraria, paid expert testimony, patent applications, registrations, and grants. If there are no conflicts of interest by any author, it should state that there are none.

Example: Author B is a paid consultant for XYZ pharmaceutical company. All other authors declare that they have no conflicts of interest.

Statement 4: Acknowledgements (optional)

Authors may provide Acknowledgments which will be published in a separate section along with the manuscript. If there are no Acknowledgements, there should be no heading or acknowledgement statement.

Example: The authors wish to thank Ms. A who assisted in the proof-reading of the manuscript.

Copyright

Upon acceptance of an article, authors will be asked to complete a 'Journal Publishing Agreement' (for more information on this and copyright, see <http://www.elsevier.com/copyright>). An e-mail will be sent to the corresponding author confirming receipt of the manuscript together with a 'Journal Publishing Agreement' form or a link to the online version of this agreement. Subscribers may reproduce tables of contents or prepare lists of articles including abstracts for internal circulation within their institutions. Permission of the Publisher is required for resale or distribution outside the institution and for all other derivative works, including compilations and translations (please consult <http://www.elsevier.com/permissions>). If excerpts from other copyrighted works are included, the author(s) must obtain written permission from the copyright owners and credit the source(s) in the article. Elsevier has preprinted forms for use by authors in these cases: please consult

<http://www.elsevier.com/permissions>.

For open access articles: Upon acceptance of an article, authors will be asked to complete an 'Exclusive License Agreement' (for more information see <http://www.elsevier.com/OAauthoragreement>).

Permitted third party reuse of open access articles is determined by the author's choice of user license (see <http://www.elsevier.com/openaccesslicenses>).

Author rights

As an author you (or your employer or institution) have certain rights to reuse your work. For more information see <http://www.elsevier.com/copyright>.

Role of the funding source

You are requested to identify who provided financial support for the conduct of the research and/or preparation of the article and to briefly describe the role of the sponsor(s), if any, in study design; in the collection, analysis and interpretation of data; in the writing of the report; and in the decision to submit the article for publication. If the funding source(s) had no such involvement then this should be stated.

Funding body agreements and policies

Elsevier has established a number of agreements with funding bodies which allow authors to comply with their funder's open access policies. Some authors may also be reimbursed for associated publication fees. To learn more about existing agreements please visit <http://www.elsevier.com/fundingbodies>.

Open access

This journal offers authors a choice in publishing their research:

Open access

- Articles are freely available to both subscribers and the wider public with permitted reuse
- An open access publication fee is payable by authors or on their behalf e.g. by their research funder or institution

Subscription

- Articles are made available to subscribers as well as developing countries and patient groups through our universal access programs (<http://www.elsevier.com/access>).
- No open access publication fee payable by authors.

Regardless of how you choose to publish your article, the journal will apply the same peer review criteria and acceptance standards.

For open access articles, permitted third party (re)use is defined by the following Creative Commons user licenses:

Creative Commons Attribution (CC BY)

Lets others distribute and copy the article, create extracts, abstracts, and other revised versions, adaptations or derivative works of or from an article (such as a translation), include in a collective work (such as an anthology), text or data mine the article, even for commercial purposes, as long as they credit the author(s), do not represent the author as endorsing their adaptation of the article, and do not modify the article in such a way as to damage the author's honor or reputation.

Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND)

For non-commercial purposes, lets others distribute and copy the article, and to include in a collective work (such as an anthology), as long as they credit the author(s) and provided they do not alter or modify the article.

The open access publication fee for this journal is **USD 1800**, excluding taxes. Learn more about Elsevier's pricing policy: <http://www.elsevier.com/openaccesspricing>.

Green open access

Authors can share their research in a variety of different ways and Elsevier has a number of green open access options available. We recommend authors see our green open access page for further information (<http://elsevier.com/greenopenaccess>). Authors can also self-archive their manuscripts immediately and enable public access from their institution's repository after an embargo period. This is the version that has been accepted for publication and which typically includes author-incorporated changes suggested during submission, peer review and in editor-author communications.

Embargo period: For subscription articles, an appropriate amount of time is needed for journals to deliver value to subscribing customers before an article becomes freely available to the public. This is the embargo period and begins from the publication date of the issue your article appears in. This journal has an embargo period of 24 months.

Language (usage and editing services)

Please write your text in good English (American or British usage is accepted, but not a mixture of these). Authors who feel their English language manuscript may require editing to eliminate possible grammatical or spelling errors and to conform to correct scientific

English may wish to use the English Language Editing service available from Elsevier's WebShop (<http://webshop.elsevier.com/languageediting/>) or visit our customer support site (<http://support.elsevier.com>) for more information.

Submission

Our online submission system guides you stepwise through the process of entering your article details and uploading your files. The system converts your article files to a single PDF file used in the peer-review process. Editable files (e.g., Word, LaTeX) are required to typeset your article for final publication. All correspondence, including notification of the Editor's decision and requests for revision, is sent by e-mail.

PREPARATION

Use of word processing software

It is important that the file be saved in the native format of the word processor used. The text should be in single-column format. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. In particular, do not use the word processor's options to justify text or to hyphenate words. However, do use bold face, italics, subscripts, superscripts etc. When preparing tables, if you are using a table grid, use only one grid for each individual table and not a grid for each row. If no grid is used, use tabs, not spaces, to align columns. The electronic text should be prepared in a way very similar to that of conventional manuscripts (see also the Guide to Publishing with Elsevier: <http://www.elsevier.com/guidepublication>). Note that source files of figures, tables and text graphics will be required whether or not you embed your figures in the text. See also the section on Electronic artwork.

To avoid unnecessary errors you are strongly advised to use the 'spell-check' and 'grammar-check' functions of your word processor.

Article structure

Manuscripts should be prepared according to the guidelines set forth in the Publication Manual of the American Psychological Association (6th ed., 2009). Of note, section headings should not be numbered.

Manuscripts should ordinarily not exceed 50 pages, *including* references and tabular material. Exceptions may be made with prior approval of the Editor in Chief. Manuscript length can often be managed through the judicious use of appendices. In general the References section should be limited to citations actually discussed in the text. References to articles solely included in meta-analyses should be included in an appendix, which will appear in the on line version of the paper but not in the print copy. Similarly, extensive Tables describing study characteristics, containing material published elsewhere, or presenting formulas and other technical material should also be included in an appendix.

Authors can direct readers to the appendices in appropriate places in the text. It is authors' responsibility to ensure their reviews are comprehensive and as up to date as possible (at least through the prior calendar year) so the data are still current at the time of publication. Authors are referred to the PRISMA Guidelines (<http://www.prisma-statement.org/statement.htm>) for guidance in conducting reviews and preparing manuscripts. Adherence to the Guidelines is not required, but is recommended to enhance quality of submissions and impact of published papers on the field.

Appendices

If there is more than one appendix, they should be identified as A, B, etc. Formulae and equations in appendices should be given separate numbering: Eq. (A.1), Eq. (A.2), etc.; in a subsequent appendix, Eq. (B.1) and so on. Similarly for tables and figures: Table A.1; Fig. A.1, etc.

Essential title page information

Title. Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible. **Note: The title page should be the first page of the manuscript document indicating the author's names and affiliations and the corresponding author's complete contact information.**

Author names and affiliations. Where the family name may be ambiguous (e.g., a double name), please indicate this clearly. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name, and, if available, the e-mail address of each author within the cover letter.

Corresponding author. Clearly indicate who is willing to handle correspondence at all stages of refereeing and publication, also post-publication. **Ensure that telephone and fax numbers (with country and area code) are provided in addition to the e-mail address and the complete postal address.**

Present/permanent address. If an author has moved since the work described in the article was done, or was visiting at the time, a "Present address" (or "Permanent address") may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.

Abstract

A concise and factual abstract is required (not exceeding 200 words). This should be typed on a separate page following the title page. The abstract should state briefly the purpose of the research, the principal results and major conclusions. An abstract is often presented separate from the article, so it must be able to stand alone. References should therefore be avoided, but if essential, they must be cited in full, without reference to the reference list.

Graphical abstract

Although a graphical abstract is optional, its use is encouraged as it draws more attention to the online article. The graphical abstract should summarize the contents of the article in a concise, pictorial form designed to capture the attention of a wide readership. Graphical abstracts should be submitted as a separate file in the online submission system. Image size: Please provide an image with a minimum of 531 × 1328 pixels (h × w) or proportionally more. The image should be readable at a size of 5 × 13 cm using a regular screen resolution of 96 dpi. Preferred file types: TIFF, EPS, PDF or MS Office files. See <http://www.elsevier.com/graphicalabstracts> for examples. Authors can make use of Elsevier's Illustration and Enhancement service to ensure the best presentation of their images and in accordance with all technical requirements: [Illustration Service](#).

Highlights

Highlights are mandatory for this journal. They consist of a short collection of bullet points that convey the core findings of the article and should be submitted in a separate editable file in the online submission system. Please use 'Highlights' in the file name and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point). See <http://www.elsevier.com/highlights> for examples.

Keywords

Immediately after the abstract, provide a maximum of 6 keywords, using American spelling and avoiding general and plural terms and multiple concepts (avoid, for example, 'and', 'of'). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

Abbreviations

Define abbreviations that are not standard in this field in a footnote to be placed on the first page of the article. Such abbreviations that are unavoidable in the abstract must be defined at their first mention there, as well as in the footnote. Ensure consistency of abbreviations throughout the article.

Acknowledgements

Collate acknowledgements in a separate section at the end of the article before the references and do not, therefore, include them on the title page, as a footnote to the title or otherwise. List here those individuals who provided help during the research (e.g., providing language help, writing assistance or proof reading the article, etc.).

Footnotes

Footnotes should be used sparingly. Number them consecutively throughout the article. Many word processors can build footnotes into the text, and this feature may be used. Otherwise, please indicate the position of footnotes in the text and list the footnotes themselves separately at the end of the article. Do not include footnotes in the Reference list.

Electronic artwork

General points

- Make sure you use uniform lettering and sizing of your original artwork.
- Embed the used fonts if the application provides that option.
- Aim to use the following fonts in your illustrations: Arial, Courier, Times New Roman, Symbol, or use fonts that look similar.
- Number the illustrations according to their sequence in the text.
- Use a logical naming convention for your artwork files.
- Provide captions to illustrations separately.
- Size the illustrations close to the desired dimensions of the published version.
- Submit each illustration as a separate file.

A detailed guide on electronic artwork is available on our website:
<http://www.elsevier.com/artworkinstructions>.

You are urged to visit this site; some excerpts from the detailed information are given here.

Formats

If your electronic artwork is created in a Microsoft Office application (Word, PowerPoint, Excel) then please supply 'as is' in the native document format. Regardless of the application used other than Microsoft Office, when your electronic artwork is finalized, please 'Save as' or convert the images to one of the following formats (note the resolution requirements for line drawings, halftones, and line/halftone combinations given below):

EPS (or PDF): Vector drawings, embed all used fonts.

TIFF (or JPEG): Color or grayscale photographs (halftones), keep to a minimum of 300 dpi.

TIFF (or JPEG): Bitmapped (pure black & white pixels) line drawings, keep to a minimum of 1000 dpi.

TIFF (or JPEG): Combinations bitmapped line/half-tone (color or grayscale), keep to a minimum of 500 dpi.

Please do not:

- Supply files that are optimized for screen use (e.g., GIF, BMP, PICT, WPG); these typically have a low number of pixels and limited set of colors;
- Supply files that are too low in resolution;
- Submit graphics that are disproportionately large for the content.

Color artwork

Please make sure that artwork files are in an acceptable format (TIFF (or JPEG), EPS (or PDF), or MS Office files) and with the correct resolution. If, together with your accepted article, you submit usable color figures then Elsevier will ensure, at no additional charge, that these figures will appear in color online (e.g., ScienceDirect and other sites) regardless of whether or not these illustrations are reproduced in color in the printed version. **For color reproduction in print, you will receive information regarding the costs from Elsevier after receipt of your accepted article.** Please indicate your preference for color: in print or online only. For further information on the preparation of electronic artwork, please see <http://www.elsevier.com/artworkinstructions>.

Please note: Because of technical complications that can arise by converting color figures to 'gray scale' (for the printed version should you not opt for color in print) please submit in addition usable black and white versions of all the color illustrations.

Figure captions

Ensure that each illustration has a caption. Supply captions separately, not attached to the figure. A caption should comprise a brief title (**not** on the figure itself) and a description of the illustration. Keep text in the illustrations themselves to a minimum but explain all symbols and abbreviations used.

Tables

Please submit tables as editable text and not as images. Tables can be placed either next to the relevant text in the article, or on separate page(s) at the end. Number tables consecutively in accordance with their appearance in the text and place any table notes below the table body. Be sparing in the use of tables and ensure that the data presented in them do not duplicate results described elsewhere in the article. Please avoid using vertical rules.

References

Citations in the text should follow the referencing style used by the American Psychological Association. You are referred to the Publication Manual of the American Psychological Association, Sixth Edition, ISBN 1-4338-0559-6, copies of which may be ordered from <http://books.apa.org/books.cfm?id=4200067> or APA Order Dept., P.O.B. 2710, Hyattsville, MD 20784, USA or APA, 3 Henrietta Street, London, WC3E 8LU, UK. Details concerning this referencing style can also be found at

<http://humanities.byu.edu/linguistics/Henrichsen/APA/APA01.html>

Citation in text

Please ensure that every reference cited in the text is also present in the reference list (and vice versa). Any references cited in the abstract must be given in full. Unpublished results and personal communications are not recommended in the reference list, but may be mentioned in the text. If these references are included in the reference list they should follow the standard reference style of the journal and should include a substitution of the publication date with either 'Unpublished results' or 'Personal communication'. Citation of a reference as 'in press' implies that the item has been accepted for publication.

Web references

As a minimum, the full URL should be given and the date when the reference was last accessed. Any further information, if known (DOI, author names, dates, reference to a source publication, etc.), should also be given. Web references can be listed separately (e.g., after the reference list) under a different heading if desired, or can be included in the reference list.

References in a special issue

Please ensure that the words 'this issue' are added to any references in the list (and any citations in the text) to other articles in the same Special Issue.

Reference management software

Most Elsevier journals have a standard template available in key reference management packages. This covers packages using the Citation Style Language, such as Mendeley (<http://www.mendeley.com/features/reference-manager>) and also others like EndNote (<http://www.endnote.com/support/enstyles.asp>) and Reference Manager (<http://refman.com/support/rmstyles.asp>). Using plug-ins to word processing packages which are available from the above sites, authors only need to select the appropriate journal template when preparing their article and the list of references and citations to these will be formatted according to the journal style as described in this Guide. The process of including templates in these packages is constantly ongoing. If the journal you are looking for does not have a template available yet, please see the list of sample references and citations provided in this Guide to help you format these according to the journal style.

If you manage your research with Mendeley Desktop, you can easily install the reference style for this journal by clicking the link below:

<http://open.mendeley.com/use-citation-style/clinical-psychology-review>

When preparing your manuscript, you will then be able to select this style using the Mendeley plugins for Microsoft Word or LibreOffice. For more information about the Citation Style Language, visit <http://citationstyles.org>.

Reference style

References should be arranged first alphabetically and then further sorted chronologically if necessary.

More than one reference from the same author(s) in the same year must be identified by the letters

"a", "b", "c", etc., placed after the year of publication. **References should be formatted with a hanging indent (i.e., the first line of each reference is flush left while the subsequent lines**

are indented).

Examples: Reference to a journal publication: Van der Geer, J., Hanraads, J. A. J., & Lupton R. A. (2000). The art of writing a scientific article. *Journal of Scientific Communications*, 163, 51-59.

Reference to a book: Strunk, W., Jr., & White, E. B. (1979). *The elements of style*. (3rd ed.). New York: Macmillan, (Chapter 4).

Reference to a chapter in an edited book: Mettam, G. R., & Adams, L. B. (1994). How to prepare an electronic version of your article. In B.S. Jones, & R. Z. Smith (Eds.), *Introduction to the electronic age* (pp. 281-304). New York: E-Publishing Inc.

Video data

Elsevier accepts video material and animation sequences to support and enhance your scientific research. Authors who have video or animation files that they wish to submit with their article are strongly encouraged to include links to these within the body of the article. This can be done in the same way as a figure or table by referring to the video or animation content and noting in the body text where it should be placed. All submitted files should be properly labeled so that they directly relate to the video file's content. In order to ensure that your video or animation material is directly usable, please provide the files in one of our recommended file formats with a preferred maximum size of 150 MB. Video and animation files supplied will be published online in the electronic version of your article in Elsevier Web products, including ScienceDirect: <http://www.sciencedirect.com>.

Please supply 'stills' with your files: you can choose any frame from the video or animation or make a separate image. These will be used instead of standard icons and will personalize the link to your video data. For more detailed instructions please visit our video instruction pages at <http://www.elsevier.com/artworkinstructions>. Note: since video and animation cannot be embedded in the print version of the journal, please provide text for both the electronic and the print version for the portions of the article that refer to this content.

AudioSlides

The journal encourages authors to create an AudioSlides presentation with their published article. AudioSlides are brief, webinar-style presentations that are shown next to the online article on ScienceDirect. This gives authors the opportunity to summarize their research in their own words and to help readers understand what the paper is about. More information and examples are available at <http://www.elsevier.com/audioslides>. Authors of this journal will automatically receive an invitation e-mail to create an AudioSlides presentation after acceptance of their paper.

Supplementary material

Elsevier accepts electronic supplementary material to support and enhance your scientific research. Supplementary files offer the author additional possibilities to publish supporting applications, highresolution images, background datasets, sound clips and more. Supplementary files supplied will be published online alongside the electronic version of your article in Elsevier Web products, including ScienceDirect: <http://www.sciencedirect.com>. In order to ensure that your submitted material is directly usable, please provide the data in one of our recommended file formats. Authors should submit the material in electronic format together with the article and supply a concise and descriptive caption for each file. For more detailed instructions please visit our artwork instruction pages at <http://www.elsevier.com/artworkinstructions>.

3D neuroimaging

You can enrich your online articles by providing 3D neuroimaging data in NIfTI format. This will be visualized for readers using the interactive viewer embedded within your article, and will enable them to: browse through available neuroimaging datasets; zoom, rotate and pan the 3D brain reconstruction; cut through the volume; change opacity and color mapping; switch between 3D and 2D projected views; and download the data. The viewer supports both single (.nii) and dual (.hdr and .img) NIfTI file formats.

Recommended size of a single uncompressed dataset is maximum 150

MB. Multiple datasets can be submitted. Each dataset will have to be zipped and uploaded to the online submission system via the '3D neuroimaging data' submission category. Please provide a short informative description for each dataset by filling in the 'Description' field when uploading a dataset.

Note: all datasets will be available for downloading from the online article on ScienceDirect. If you have concerns about your data being downloadable, please provide a video instead. For more information see: <http://www.elsevier.com/3DNeuroimaging>.

Submission checklist

The following list will be useful during the final checking of an article prior to sending it to the journal for review. Please consult this Guide for Authors for further details of any item.

Ensure that the following items are present:

One author has been designated as the corresponding author with contact details:

- E-mail address
- Full postal address

All necessary files have been uploaded, and contain:

- Keywords
- All figure captions
- All tables (including title, description, footnotes)

Further considerations

- Manuscript has been 'spell-checked' and 'grammar-checked'
- References are in the correct format for this journal
- All references mentioned in the Reference list are cited in the text, and vice versa
- Permission has been obtained for use of copyrighted material from other sources (including the Internet)

Printed version of figures (if applicable) in color or black-and-white

- Indicate clearly whether or not color or black-and-white in print is required.
- For reproduction in black-and-white, please supply black-and-white versions of the figures for printing purposes.

For any further information please visit our customer support site at

<http://support.elsevier.com>.

AFTER ACCEPTANCE

Use of the Digital Object Identifier

The Digital Object Identifier (DOI) may be used to cite and link to electronic documents. The DOI consists of a unique alpha-numeric character string which is assigned to a document by the publisher upon the initial electronic publication. The assigned DOI never changes. Therefore, it is an ideal medium for citing a document, particularly 'Articles in press' because they have not yet received their full bibliographic information. Example of a correctly given DOI (in URL format; here an article in the journal *Physics Letters B*): <http://dx.doi.org/10.1016/j.physletb.2010.09.059>

When you use a DOI to create links to documents on the web, the DOIs are guaranteed never to change.

Online proof correction

Corresponding authors will receive an e-mail with a link to our online proofing system, allowing annotation and correction of proofs online. The environment is similar to MS Word: in addition to editing text, you can also comment on figures/tables and answer questions from the Copy Editor.

Web-based proofing provides a faster and less error-prone process by allowing you to directly type your corrections, eliminating the potential introduction of errors.

If preferred, you can still choose to annotate and upload your edits on the PDF version.

All instructions for proofing will be given in the e-mail we send to authors, including alternative methods to the online version and PDF.

We will do everything possible to get your article published quickly and accurately.

Please use this proof only for checking the typesetting, editing, completeness and correctness of the text, tables and figures. Significant changes to the article as accepted for publication will only be considered at this stage with permission from the Editor. It is important to ensure that all corrections are sent back to us in one communication.

Please check carefully before replying, as inclusion of any subsequent corrections cannot be guaranteed. Proofreading is solely your responsibility.

Offprints

The corresponding author, at no cost, will be provided with a personalized link providing 50 days free access to the final published version of the article on [ScienceDirect](#). This link can also be used for sharing via email and social networks. For an extra charge, paper offprints can be ordered via the offprint order form which is sent once the article is accepted for publication. Both corresponding and co-authors may order offprints at any time via Elsevier's WebShop (<http://webshop.elsevier.com/myarticleservices/offprints>). Authors requiring printed copies of multiple articles may use Elsevier WebShop's 'Create Your Own Book' service to collate multiple articles within a single cover (<http://webshop.elsevier.com/myarticleservices/booklets>).

AUTHOR INQUIRIES

You can track your submitted article at <http://www.elsevier.com/track-submission>. You can track your accepted article at <http://www.elsevier.com/trackarticle>. You are also welcome to contact Customer Support via <http://support.elsevier.com>.

Appendix 9 – Study Characteristics Table

Reference	Study design Methodology Measures	Sample size	Gender Age range (mean)	Population characteristics	Key findings regarding attachment
Barnas, Pellina & Cummings (1991) (USA)	Structured interview Cross- Sectional	48	100% female 65-87 (72.5)	Recruited from existing pool through university projects. Only mothers recruited	<ul style="list-style-type: none"> • Security of attachment correlated with measures of social wellbeing • but not psychological or physical well-being
Chopik et al (2013) (USA)	(ECR-R ²) Cross- Sectional	86,555	71.8% female 28.2% male 18-70 (30.7)	Internet respondents. Participants aged over 70 excluded.	<ul style="list-style-type: none"> • Only attachment anxiety & avoidance investigated • Attachment anxiety was highest among younger adults & lowest among middle & older aged adults • Attachment avoidance was highest amongst middle aged adults & lowest among younger & older adults • Individuals with a partner had lower levels of attachment anxiety & avoidance compared to single individuals particularly in younger & older adults • Women had slightly higher anxiety & avoidance styles particularly in younger adults
Diehl et al (1998) (USA)	RQ(1987) ³ Cross- Sectional	304	49.3% female 50.7% male 20-87 (48.6)	Randomly selected from suburban communities – high, middle and low income. Age stratified sample but overly represented high functioning and well educated.	<ul style="list-style-type: none"> • Found mean differences in family climate & personality variables on basis of individuals' attachment styles but no interactions by age group

² Experiences in Close Relationships-Revised Inventory (Fraley, Waller & Brennan, 2000)

² Relationship Questionnaire (Hazan & Shaver, 1987) & as modified by Bartholomew & Horowitz, 1991)

Dieperink et al (2001) (USA)	RQ(1991) ECR (1997) Cross-Sectional	107	not reported 71 -78.5 (75.4)	Former Prisoner of War veterans. Community sample originally recruited in 1997.	<ul style="list-style-type: none"> Those with secure attachment styles scored significantly lower on PTSD measures Attachment styles were more predictive of PTSD symptoms than was trauma severity
Jain & Labouvue-Vief (2010) (USA)	Attachment Prototypes Questionnaire (Bartholomew & Horowitz, 1991) AKA RQ (1991) Cross-Sectional	(159) 69 90	75%female 25% male 72% female 28% male 60-89 (74) 17-39 (22.4)	Recruited from senior centres and undergraduate courses. Independent t-test no age differences in terms of education.	<ul style="list-style-type: none"> No overall (across both) main effect of attachment style and emotion category predicting response times But a main effect was found for emotion category predicting response times in the older adult group
Kirchmann et al (2013) (Germany)	Adult Attachment Prototype Rating (Kirchmann et al, 2007; Pilkonsis, 1988; Strauss et al 1999) Cross-Sectional	81	Not reported 69-73	All patients of 1 st author (who is a GP).	<ul style="list-style-type: none"> Attachment security was positively correlated to life satisfaction Association between medical burden & lower life satisfaction was stronger for insecure attachment styles than secure
Klug et al (2014) (Germany)	Relationship-Specific Attachment Scales for Adults (Asendorpf et al, 1997) Cross-Sectional	969	54.3% female 45.7% male 64-94 (not reported)	Randomly selected from population registries. Part of a larger study.	<ul style="list-style-type: none"> For men, lower depression scores were associated with higher attachment security & no reports of feelings of loneliness For women, lower depression was associated with not feeling lonely & there was a weaker association with secure attachment
Long & Martin (2000) (USA/Germany)	Based on Hazan & Shaver (1986) ⁴	100	not reported	Recruited through churches, nursing home	<ul style="list-style-type: none"> Those with an anxious personality received decreased affection, had

⁴ but as modified by using Likert-type scales (Collins & Read, 1990)

	Cross-Sectional		84-102 (90.4)	and retirement facilities and 'by referral from acquaintances'	lower perceptions of attachment to adult children but increased feelings of affection <ul style="list-style-type: none"> Parents & children who had anxious personalities were more likely to report feeling lonely
Magai et al (2001) (USA)	Relationship Scale Questionnaire (Griffin & Bartholomew (1994) Cross-Sectional	800	63% female 37% male 65-86 (74)	Recruited from larger community based sample from census files. Significant differences in age, income and education levels between African and European American ethnicity.	<ul style="list-style-type: none"> Most of the sample had dismissing/avoidant attachment styles European Americans scored higher than African Americans on attachment security African Americans scored higher than European Americans on dismissing attachment
Lipson-Parra (1990) (USA)	Lipson-Parra Adult Attachment Scale (Lipson-Parra, 1990) Cross-Sectional	211	72% female 28% male 65-99 (not reported)	Convenience community sample, snowball sampling. Attempted to recruit representative sample guided by the census results.	<ul style="list-style-type: none"> Significant correlations between attachment scores & the items regarding residential proximity, contact frequency & closeness of parental relationships were found LAAS⁵ reliability & validity was supported
Perren et al (2007) (Switzerland)	Single item measure of attachment style (Hazan & Shaver, 1990) Cross-Sectional	T1:116 T2: 89 T3:68	Not reported range not reported (70.9)	Patient (with dementia) – caregiver dyad (spousal). Only caregiver data reported as per exclusion criteria	<ul style="list-style-type: none"> Husbands' & wives' attachment styles were significantly associated Caregivers' avoidance & care recipients' insecure attachment style were associated with increased levels of "dementia-related problem behaviour"
Rusby & Tasker (2008) (UK)	RQ (1991) Cross-Sectional	869 770	62.5% female 37.5% males 62-72	Evacuated group ⁶ (EG) non-evacuated group ⁷ (NEG)	<ul style="list-style-type: none"> Evacuation occurred between the ages of 4-6 years EG reported fewer incidences of secure

⁵ L Lipson-Parra Adult Attachment Scale (Lipson-Parra, 1990)

⁶ EG: Evacuated group refers to those evacuated from their home in ww2

⁷ NEG: Those not evacuated from their home during ww2

		99	not reported not reported	recruited from notices in libraries, newspapers and school magazines	attachment styles & an increase in the fearful category compared to NEG <ul style="list-style-type: none"> • The quality of care received & frequency of parental visits was significantly associated with attachment style for females only • Across all groups poorer home nurture was associated with low incidences of secure attachment • Males showed increases in the dismissing category • Females showed increases in the fearful category
Segal, Needham & Coolidge (2009) (USA)	Measurement of Attachment Qualities (MAQ, Carver, 1997) RSQ (1994) ⁸ Cross-Sectional	144 106	67% female 33% male 18-34 (22.5) 56% female 44% male 60-96 (68.6)	Younger adults Undergraduate students Older adults Relatives of younger adult sample or recruited through senior centres and newspaper adverts	<ul style="list-style-type: none"> • Older adults scored lower than those in the younger age group on the ambivalent-worry attachment scale of MAQ & the preoccupied attachments scale of RSQ • No age differences found regarding secure, avoidant & dismissing attachment
Verdecias et al (2009) (USA)	RSQ (1994) Cross-Sectional	70	73% female 27% male 60-85 (68.3)	Recruited as part of larger multifactorial study – recruitment or demographics not reported in this paper	<ul style="list-style-type: none"> • Significant correlations were found between the preoccupied attachment dimension & the sleep measures • High scores on the preoccupied attachment dimension were more likely to report daytime napping & using sleep-inducing medications • No significant correlations were uncovered among sleep measures & the secure, dismissive & fearful attachment dimensions

⁸ Relationship Style Questionnaire (Griffin & Bartholomew, 1994)

Waugh et al (2007) (UK)	Adult Attachment Styles Questionnaire (Hazan & Shaver, 1987) Cross-Sectional	245 96	66% female 34% male 60-75 (68.3) 52% female 48% male 61-75 (68.5)	EG Recruited from Evacuee Reunion Association NEG Recruited from magazines, press and leaflets	<ul style="list-style-type: none"> Abuse during evacuation was linked with higher scores on Impact of Event Scale, General Health Questionnaire & insecure attachment styles
Webster (1997) (Canada)	RQ (1991) Cross-Sectional	76	73.7% female 26.3% male range not reported (67.9)	Community living sample. Recruited from monthly newspaper	<ul style="list-style-type: none"> Participants with secure & dismissive attachment styles were happier than those with fearful attachment styles Distribution of across all attachment styles differed from previous research with younger adults as participants as specified in Bartholomew & Horowitz (1991)
<i>Used same dataset reported differently, therefore only original paper checked for quality criteria.</i>		Duplicate dataset to Magai et al (2001) (see above)		<i>Findings from other papers from same dataset below.</i>	
1. Consedine & Magai (2003) USA				<ul style="list-style-type: none"> Measures of Attachment & Differential Emotions Scale (Izard, 1972) Secure attachment associated with less guilt, contempt & shame and more joy, sadness interest, fear and anger Dismissive attachment associated with greater interest and with less joy, shame and fear Altogether results similar to younger samples, but with developmental differences Results consistent with a developmental-functionalist theory of emotions 	
2. Montague et al (2003) USA				<ul style="list-style-type: none"> Attachment dimensions differentially predicted by childhood socialization patterns and current religiosity Ethnic differences (between African American and European American adults) in adult 	

		attachment and childhood socialization practices were found
3. Merz & Consedine (2012) Netherlands & New Zealand		<ul style="list-style-type: none"> • Secure and dismissive attachment dimensions associated with greater well being • Fearful/avoidant attachment with less • Secure attachment and wellbeing was stronger among African Americans and English speaking Caribbean compared with European American and Eastern European immigrant groups • Negative fearful/avoidant attachment style on wellbeing was buffered by being an English speaking Caribbean but not for the other groups
4. Magai et al (2004) USA		<ul style="list-style-type: none"> • Reported early emotion socialization had both direct and indirect (mediated by attachment style) effects on emotional experience • Age interacted with emotion socialization and associated emotional experience • Impact of punitive socialization on adult negative affect was greater in older adults, in comparison to younger adults
5. Merz & Consedine (2009) Netherlands & USA		<ul style="list-style-type: none"> • Emotional support associated with higher wellbeing • Instrumental support associated with decreased wellbeing • Above associates related to attachment style - those with higher attachment security emotional support had stronger positive and instrumental support less negative effects on wellbeing
6. Consedine et al (2013) New Zealand, USA, Netherlands		<ul style="list-style-type: none"> • Attachment security and fearful avoidance predicted more health symptoms • But only fearful avoidance predicted greater functional impairment • Negative affect only partially mediated association between attachment and outcomes but only for fearful avoidance

Appendix 10 - Study Quality table

	Barnas, Pellina & Cummonds (1991)	Chopik et al (2013)	Consedine & Magai (2003)	Consedine et al (2013)	Diehl et al (1998)	Dieperink et al (2001)	Jain & Labouvie-vief (2010)	Kirchmann et al (2013)	Klug et al (2014)	Long & Martin (2000)	Magai et al (2001)
1. Does the study address a specific research question?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
a. did the methodology used in the study answer their research question?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2. Are the selection methods clearly defined & appropriate?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
a. are participants representative of a defined population?	No	No	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes
b. were they recruited in an acceptable way?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
c. are inclusion & exclusion criteria clearly defined?	N/R	N/R	N/R	Yes	Yes	N/R	N/R	N/R	Yes	Yes	N/R
d. are criteria justified?	N/R	N/R	N/R	Yes	Yes	N/R	Yes	N/R	Yes	N/R	N/R
3. Is the measurement of study variables clearly defined & appropriate? –	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
a. are the measures validated?	N/R	N/R	Yes	Yes	N/R	Yes	Yes	Yes	Yes	Yes	Yes
b. are the measures reliable?	N/R	N/R	N/R	N/R	N/R	Yes	Yes	Yes	Yes	Yes	Yes
c. are the measures validated for older people?	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	Yes	N/R	N/R
4. Are any design specific sources of bias reported? –	No	N/R	N/R	N/R	Yes	N/R	N/R	Yes	Yes	Yes	Yes
a. are any design specific sources of bias appropriately minimised?	N/R	N/R	N/R	N/R	Yes	N/R	N/R	Yes	Yes	Yes	Yes
b. were the measurement methods similar in all groups?	Yes	N/R	Yes	N/R	Yes	N/R	N/R	Yes	Yes	Yes	Yes
c. is there evidence of minimisation of bias?	No	N/R	N/R	N/R	N/R	N/R	N/R	Yes	N/R	Yes	N/R
5. Is the control of confounding variables reported & appropriate? –	N/R	Yes	Yes	N/R	Yes	Yes	N/R	Yes	Yes	N/R	N/R
a. have the authors identified all important confounding factors?	N/R	Yes	Yes	N/R	Yes	Yes	Yes	Yes	Yes	Yes	No
b. have they taken account of the confounding factors in the design?	N/R	Yes	Yes	N/R	Yes	Yes	Yes	N/R	Yes	Yes	No
c. have they taken account of the confounding factors in the analysis?	N/R	Yes	Yes	N/R	Yes	Yes	Yes	N/R	Yes	Yes	No
6. Is the use of statistics clearly defined & appropriate? –	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
a. appropriate method of analysis used?	Yes	Yes	Yes	Yes	N/R	Yes	Yes	Yes	Yes	Yes	Yes
b. effect sizes & power calculations completed?	N/R	Yes	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
c. effect sizes & power calculations met?	N/R	Yes	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
d. do they explain how missing data was addressed?	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	Yes	Yes	N/R
7. Are any conflicts of interest declared?	N/R	N/R	N/R	Yes	N/R	N/R	N/R	N/R	N/R	N/R	N/R
8. Has the research specified if it had gained ethical approval?	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	Yes	N/R	N/R
9. Is the research supported by a regulatory body?	N/R	Yes	Yes	Yes	Yes	N/R	Yes*	N/R	Yes	N/R	Yes

N/R = Not Reported

	Lipson-Parra (1990)	Perren et al (2007)	Rusby & Tasker (2008)	Segal, Needham & Coolidge (2009)	Verdecias et al (2009)	Waugh et al (2007)	Webster(1997)
1. Does the study address a specific research question?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
a. <i>did the methodology used in the study answer their research question?</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2. Are the selection methods clearly defined & appropriate?	Yes	Yes	Yes	No	N/R	Yes	Yes
a. <i>are participants representative of a defined population?</i>	Yes	Yes	Yes	Yes	N/R	Yes	Yes
b. <i>were they recruited in an acceptable way?</i>	Yes	Yes	Yes	No	N/R	Yes	Yes
c. <i>are inclusion & exclusion criteria clearly defined?</i>	N/R	Yes	N/R	N/R	N/R	Yes*	N/R
d. <i>are criteria justified?</i>	N/R	N/R	N/R	N/R	N/R	N/R	N/R
3. Is the measurement of study variables clearly defined & appropriate? –	Yes	Yes	No	Yes	Yes	Yes	Yes
a. <i>are the measures validated?</i>	Yes	Yes *	N/R	Yes	Yes	Yes	Yes
b. <i>are the measures reliable?</i>	Yes	Yes*	N/R	Yes	Yes	Yes	Yes
c. <i>are the measures validated for older people?</i>	Yes	N/R	N/R	Yes	Yes	N/R	N/R
4. Are any design specific sources of bias reported? –	N/R	N/R	N/R	N/R	N/R	Yes	N/R
a. <i>are any design specific sources of bias appropriately minimised?</i>	N/R	N/R	N/R	N/R	N/R	Yes	N/R
b. <i>were the measurement methods similar in all groups?</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
c. <i>is there evidence of minimisation of bias?</i>	N/R	N/R	N/R	N/R	N/R	N/R	N/R
5. Is the control of confounding variables reported & appropriate? –	N/R	Yes	N/R	N/R	Yes	Yes	N/R
a. <i>have the authors identified all important confounding factors?</i>	N/R	N/R	N/R	N/R	Yes	N/R	N/R
b. <i>have they taken account of the confounding factors in the design?</i>	N/R	Yes	N/R	N/R	Yes	No	N/R
c. <i>have they taken account of the confounding factors in the analysis?</i>	N/R	Yes	N/R	N/R	Yes	Yes	N/R
6. Is the use of statistics clearly defined & appropriate?-	Yes	Yes	Yes	Yes	Yes	Yes	Yes
a. <i>appropriate method of analysis used?</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
b. <i>effect sizes & power calculations completed?</i>	N/R	N/R	Yes	#	Yes	N/R	N/R
c. <i>effect sizes & power calculations met?</i>	N/R	N/R	No	#	No	N/R	N/R
d. <i>do they explain how missing data was addressed?</i>	Yes	Yes	N/R	N/R	N/R	N/R	N/R
7. Are any conflicts of interest declared?	N/R	N/R	N/R	N/R	N/R	N/R	N/R
8. Has the research specified if it had gained ethical approval?	N/R	N/R	N/R	Yes	N/R	N/R	N/R
9. Is the research supported by a regulatory body?	N/R	Yes	Yes	N/R	Yes	N/R	Yes

* = inconsistent

= effect size only

Appendix 11 - Measures of Attachment

Measure	Measure used by	Categorical or Dimensional	Self-Report or Interview	Relationship Investigated
Adult Attachment Prototype Rating (Kirchmann et al, 2007; Pilkonsis, 1988; Strauss et al 1999)	Kirchmann et al (2013) (Germany)	Categorical & Dimensional	Interview	General
Adult Attachment Styles Questionnaire (Hazan & Shaver, 1987)	Waugh et al (2007) (UK)	Categorical	Self-report	Relationships in General
Based on Hazan & Shaver (1986) ⁹	Long & Martin (2000) (USA/Germany) Perren et al (2007) (Switzerland)	Dimensional	Self-Report	Relationship to adult offspring
Experiences in Close Relationships (1997)	Dieperink et al (2001) (USA)	Dimensional	Self-Report	Romantic Relationships
ECR-R ¹⁰ (2000)	Chopik et al (2013) (USA)	Dimensional	Self-Report	Relationships in General
Lipson-Parra Adult Attachment Scale (Lipson-Parra, 1990)	Lipson-Parra (1990) (USA)	Dimensional	Self-Report	Unclear ¹¹
Measurement of Attachment Qualities (MAQ, Carver, 1997)	Segal, Needham & Coolidge (2009) (USA)	Dimensional	Self-Report	Unclear (see footnote 3)
Relationship Questionnaire (Bartholomew & Horowitz, 1991)	Rusby & Tasker (2008) (UK) Webster (1997) (Canada) Diehl et al (1998) (USA) Dieperink et al (2001) (USA) Jain & Labouvue-Vief (2010) (USA)	Categorical	Self-Report	Relationships in general
Relationship Scale Questionnaire (Griffin &	Magai et al (2001) (USA) Verdecias et al (2009)	Dimensional	Self-Report	Past and Present Close

⁹ but as modified by using Likert-type scales (Collins & Read, 1990)

¹⁰ Experiences in Close Relationships-Revised Inventory (Fraley, Waller & Brennan, 2000)

¹¹ States relationship to attachment figure but does not specify which relationship e.g. could be referring to adult offspring or romantic relationship.

Bartholomew (1994)	(USA) Segal, Needham & Coolidge (2009) (USA)			Relationships in General
Relationship-Specific Attachment Scales for Adults (Asendorpf et al, 1997)	Klug et al (2014) (Germany)	Dimensional	Self-Report but applied in an interview	Current or Past Most Important Relationship
Single item measure of attachment style (Hazan & Shaver, 1990)	Perren et al (2007) (Switzerland)	Categorical	Self-Report	Relationships in General
Structured interview	Barnas, Pellina & Cummings (1991) (USA)	Dimensional	Interview	Relationship to Adult Offspring